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Ruby  
from  
Aunt Phoebe

WILSON, J.  
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THE WATER CURE.

A PRACTICAL TREATISE

ON

THE CURE OF DISEASES

BY

WATER,

AIR, EXERCISE, AND DIET:

BEING A NEW MODE OF

Restoring injured Constitutions to robust health,

FOR THE RADICAL CURE

OF

DYSPEPTIC, NERVOUS, AND LIVER COMPLAINTS, TIC DOULOUREUX, GOUT AND  
RHEUMATISM, SCROFULA, SYPHILIS, AND THEIR CONSEQUENCES,  
DISEASES PECULIAR TO WOMEN AND CHILDREN,  
FEVERS, INFLAMMATIONS, &c.

BY

JAMES WILSON,

PHYSICIAN TO HIS SERENE HIGHNESS PRINCE NASSAU;  
MEMBER OF THE ROYAL COLLEGE OF SURGEONS;  
FELLOW OF THE ROYAL MEDICO-CHIRURGICAL SOCIETY,  
ETC. ETC. ETC.

"We are unwilling to believe that great effects can proceed from simple causes,  
and so WATER fell into disuse."

Third Edition.

LONDON: JOHN CHURCHILL, PRINCES STREET, SOHO.

A. H. BAILY & CO., CORNHILL.

1842.





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TO  
VINCENT PRIESSNITZ,

OF GRAEFENBERG,

THESE PAGES ARE INSCRIBED,

AS A HUMBLE TRIBUTE

TO HIS

GENIUS, PERSEVERANCE, TEMPERANCE,

AND INDUSTRY.





## P R E F A C E.

---

*“ We are unwilling to believe that great effects can proceed from simple causes—AND SO WATER FELL INTO DISUSE.”*

---

I HAVE chosen this motto, which I made use of some years ago ; it is as applicable to the present work—indeed more so, than it was to the former one. The spirit of this quotation is in truth, the great pivot on which the neglect and dislike to use or regard water as a remedy turns ; there may be some minor ones, but it would be invidious and unnecessary to enumerate them. When I mention anything about water, people often say, “ What ! *simple water*, that we sometimes drink, and wash our face and hands in, to cure disease and stop an inflammation ?” I

sometimes, for want of something better to say, reply, “What! *simple steam*, that hisses from your kettle spout, and rises from your scalding tea!” To this I add, yet consider for a moment what varied and wonderful effects this “*simple steam*” is made to produce in the physical world—on inanimate matter, where all the wondrous moving phenomena of life are wanting. Yet, in its sphere, what can exceed it in force or surpass it in power of moving. Acting on complicated machinery, we see it transporting a man 150 miles to dine with a friend, or carrying him where he list, against wind and tide—doing the work of thousands of men, and advancing the “*Times*” in every sense of the word. And when applied to man’s local injuries, soothing at once the most excruciating pain, and preventing locked jaw, and all evil consequences. When this element in its condensed state is applied to the complicated machinery of the human body, its effects are even more varied and beautiful.

After wandering about for some years in search of health, with little hope that I should



ever be of any use to myself or to any one else, moralizing my weary way, like another melancholy Jaques, my good fortune presented to my observation a book on the cure of diseases by water. I need not say that I at once decided on going to Graefenberg, where, after a long sojourn, and a short stay at several other establishments of the same kind, I left all my complicated ailments. Soon after this, I sat down to compose a work on the water cure, which I hoped some 100 or 150 medical men whom I knew personally, or by reputation, might read with some curiosity.

When I was far advanced in my task, a lady gave me a "Court Journal," containing the advertisement of a popular work in English on the same subject. As the author of this was a non-professional gentleman of my acquaintance, I imagined it could not be of a practical nature, however good otherwise, and the idea struck me of attempting a popular work too ; forcing it on the attention of medical men through the public, laying aside for a time the work I was engaged

in, and which I had advertised. This I was the more stimulated to do, from the fact that all the medical men (and they were many) to whom I had spoken since I left Graefenberg, about what I had seen, turned a deaf ear to me, some laughing outright—others, more polite, smiling, and only laughing in their sleeves.

During the few days I have been in London, I have listened, with no little interest, to the variety of opinions expressed about the curing of diseases by water, I must say some were favourable—indeed, more so than I hoped for—admitting the possibility of such a thing; others, on the other hand, treated it with unmeasured ridicule. Yet some were a little staggered, when I told them that I HAD SEEN children of all ages going out and walking about, and that in anything but fine weather, while labouring under scarlet fever, and ulcerated throats—and that their “dear mammas” had not the slightest idea of any danger, or any anxiety about the result; putting them in their wet sheets and baths, and sending them out to play. But this



was a trifling circumstance. I added, “ I have seen inflammation of the lungs, where nearly the whole substance of the lungs was inflamed, as shewn by the stethoscope and by every other rational means of ascertaining the fact, cured in thirty-eight hours, and the gentleman walking about as if nothing had happened. *I have seen* insanity cured in a few months, and madness and apoplexy in a few hours. Gout, rheumatism, scrofula, stomach complaints, tic douloureux, cured by the dozen, and all with ‘ *simple water,*’ that you ‘ *sometimes drink, and wash your face and hands in !*’ ”

This winter, at Nice, there were some hundreds of deaths from scarlet fever. At one time, I was told by a native practitioner, that there were twelve and fifteen cases dying per day. An English practitioner lost a daughter; she was one of those intellectual and highly-talented creatures, whose loss casts a shadow over a man’s life for many and many a day. Now, I do boldly assert, that I see no necessity for so many deaths, *or, indeed, any at all,* occurring

from scarlet fever. As I came through Boulogne, I heard that it had been very fatal there also. At Antibes, inflammation of the lungs was carrying people off, just as the scarlet fever was doing, a little further on the coast. I have said that many doctors have laughed and smiled, when I related the results I had witnessed from the use of water as a remedy; I too could laugh again, were the subject not one of too melancholy a nature: such laughter would now be more meet for demoniacal derision than for one whose object is to STIMULATE INQUIRY, and GIVE INDUCEMENTS TO INVESTIGATION. I would ask any one what my feelings must be, who have been *accustomed* for so long a time to see hundreds living without *drugs* or *stimulating drinks* of any kind, people who had lived so for years, and who, moreover, saw no probability of their ever again being induced to take either the one or the other. Must not my thoughts, then, partake something of amazement and deep regret, to see an enlightened people, “drugging away,” and drinking all



kinds of stimulating compounds, as if life and health depended upon it.

Supposing, for the sake of argument, that drugs and stimulants may sometimes be of service, still I will assert that this is so rarely the case, and the good done so little, compared to the immense amount of mischief they entail, that I am justified in what I say of them. My opinion must be clear enough in this little introductory work, which, I may observe, is nothing more than a few bars of the overture—a hasty and unfinished rehearsal. I know also that what I have said about drugs and stimulants, is the opinion of a great number of medical men, greatly my superiors in every way; still there is little, comparatively, done in the way of amelioration. Men will not speak out, because it entails abuse, misrepresentation, and a variety of disagreeables, which most men naturally shrink from; and there may be some who feel more or less with the *philanthropic* French king, who said, “ These matters, however bad, and however destined to be destroyed and removed by the progress of

man's enlightenment, will last my time, and serve my purpose. "*Après nous le deluge !*" Let it not be supposed that I take any credit to myself. These are not the days when men's houses are burnt down about their ears for difference of opinion, by the exposing of errors, or the discovery of some useful thing ; on the contrary, he finds a party, and often a large one. There is another secret, too : the temperate man, once thoroughly convinced and fully imbued with the knowledge of the powers of his shèet anchor, wants no credit or praise, and fears no unjust abuse or condemnation.

Many have said to me, this mode of treatment is against all *experience* ; and we have been told so by medical men of *thirty years' experience*. Experience, when in the right track, and when profited by, is a fine thing ; but what is miscalled by that name, full often only roots and confirms the most absurd and fatal errors. More than twelve years ago, in our largest shipping town, I heard a practitioner in great practice order a strong stimulating liniment to rub the ulcerated



throat of a patient in scarlet fever. I took the liberty of observing, “ that having from fifty to sixty patients a day to visit, many of them in scarlet fever, poor people placed under the most unfavourable circumstances, I was yet fortunately enabled, by warm fomentations continually applied to the throat and abdomen, by giving *no medicines*, except *innocent deceptive ones* to please the patient, and abundant drink of toast and water, to avoid losing a single case.” I shall never forget the answer of this “ *grave seignior*.” With a solemnity that was quite overpowering, he said, “ Young sir, I have thirty years’ experience ; but I perceive that you have got your head full of new-fangled notions.” It would have been the greatest breach of medical etiquette to have said another word—an ungentlemanly interference. However, the internal remedies given in this case, being quite in keeping with the *frightful* external application, the patient died. On that day, “ I had a dream that was not all a dream,” that something might yet be done to save mankind from the *misapplication* and

*abuse* of drugs, and from the fatal results of routine “*experience.*”\*

Apropos to drugs and stimulants—let any one ask himself the question, why should there be in London such an immense number of GIN PALACES and *druggist’s shops*? You cannot go twenty yards in any street without meeting with both. There must be something very wrong somewhere—“something rotten in the state of Denmark!”

How often have I observed the *undertaker’s house* placed between a gin palace and a druggist’s shop, and heard at the same time the curse and drunken hiccup,—the undertaker’s hammer,—and the pestle and mortar of the druggist,—blending into strange unison, and producing a combined sound, which, when modulated and softened down by distance, came on the ear like an unearthly wail of “Woe! woe!”

Returning home, the other night, by a long

\* My wife had scarlet fever at Nice as badly as any one, and soon recovered; but she did not take one grain of medicine; nor had she or I one moment’s apprehension.



walk in this vast metropolis, I observed a quiet, retired looking undertaker's ; a single candle in the front shop, dimly lighting a solitary figure dressed in rusty black. In his hand he held a small hammer, with which he produced a monotonous and unceasing rat-tat. He seemed to my wandering thoughts, a journeyman of the Fates—a poor, half-starved stipendiary, doomed to count out the seconds of human existence, and prompt the cutting of the fatal thread. There he stood *unwatched, unobserved*, and partially thrown into shade, but still steady and regular in his beats on a coffin lid.

Did you ever hear, while alone at night, the *tic-tic-tic* of what is called the spider death-watch, or observe it, while half hidden at the mouth of its net, watching the passing flies?—So seemed to me the position of this solitary figure in black, as the crowd of anxious looking men and women were hurrying by ; numbers of whom suddenly arresting their steps, entered on one side into a GIN PALACE—on the other, into a DRUGGIST'S SHOP,—both *brilliantly illuminated*, of

*festive appearance, and inviting aspect.* They looked to me, indeed, like *gaudy baits*, held out by the solitary figure of the hammer and nails, to entice the human flies into the deadly trap—*where* “FUNERALS ARE PERFORMED!”

In all my remarks, I refer in no way to persons; it is the unfortunate *system* that I deprecate with all my humble powers. In my small acquaintance, there are numbers of medical men for whom I feel the most profound esteem, and others that have not long been dead that I almost venerate. I repeat, it is *the system* which leads men to do that which they do not like, and which in their hearts they also deprecate. Men are the sport of circumstances—chameleons, that more or less take the colouring and impress of what surrounds them. Remove *temptation and evil example*. This is the alpha and omega—the beginning and the end. Give men motives to be what they ought, and you will find them what you wish, for “How oft the sight of means to do ill-deeds makes deeds ill done!”



I have pointed out with candour some of what I consider faults in Vincent Priessnitz, but were I even to enumerate all that might be found, they would still be but as *spots* on the large disk of the good he has been doing for more than twenty years, and of that which he has done through the instrumentality of others.

It will be perceived, that I have taken up and introduced, as intimately connected with the water cure, the all-important and prolific theme of rational temperance, and that, without much care about time or place (it never can be misplaced) ; and as I am never tired of “ still harping on my daughter,” I hope the courteous reader will excuse me the following remarks. It will be found, that there is hardly a person you meet with who has not some acquaintance, friend, or relation, who has not died suddenly of APOPLEXY. Now, in this perilous state of matters, if I were an alderman or lord mayor, of true *conservative* principles, the first thing I should feel myself bound to do to preserve my *consistency*, would be, to pay the Duke of Wellington a visit, and entreat his Grace to tell me

how and by what wondrous secret he extends his conservative principles to his *own constitution*? How, after his eventful life, with all its vicissitudes, he has seen so many of his brave companions depart, and himself remain still in his place, and likely to continue so for a long time to come. The imminent danger of cerebral perplexity, or apoplexy, which many of the habitués of the lord mayor's too hospitable board are in, would render this a *conservative* secret worth knowing, and it might with liberality be published for the benefit of the many. I often imagine how low-spirited his Grace must be, how melancholy he must feel every six or seven years or so, when, dining with the lord mayor, he sees a new set of faces; and when he naturally inquires, *Where are they?* My old friends who "*Did the good things here such justice?*" he is not answered by echo—"Where are they?" but by fac-similes of his missing friends, who reply, "Thanks, your Grace, the absent have *resigned* their seats in our favour; but they are still at another *feast*, 'not where they eat, but where they are eaten.'"



I can tell them this *fact* without their inquiring of the noble Duke: after his *feast*, there is neither BLACK draught nor BLUE pill, neither antACIDS nor BITTERS of any description. How his Grace manages I leave my *feasting* friends to imagine. By-the-bye, his Grace might also be asked how he makes speeches without destroying his stomach and brain, or shortening his days, as has been too often the case with so many of his great friends and predecessors. Perhaps he might make the following reply:—"If a man cannot make a speech without putting his brain and stomach on fire with brandy or wine, he had much better hold his peace, for '*he pays too dear for the whistle.*'"

There is a great outcry, now that little else can be said, that in the *water cure* there is nothing new. Now, supposing it to be so, I would ask, what does it signify whether it is new or old, provided it be good—where it had been buried, or how many knew where it was hidden? Priessnitz, digging away in the vineyard, has been the finder of this imperfectly known "goddess of

health,"—and in a terribly mutilated state he found her ; but he has polished up the treasure, given it a new face, and added a leg and an arm, with an artistical excellence worthy of a Michael Angelo. Tut ! tut !—what does it signify to the sick man whether it was a peasant or a *fellow* of some college that found or contrived what is to make him well again ? Marble had been chiselled into a variety of forms, not without excellence, before the Venus and Apollo made their appearance ; and, combined with other matters, had assumed a variety of shapes in useful and beautiful buildings before, by man's imagination and constructiveness, the great temples of Rome and Milan arose to astonish the eye of the gazer. How many of the thousands who have stood in admiration beholding them, ever ask, “ Who did it ? ” For my part, I should have liked the water cure just as well,—it would have taken possession of my mind and *future existence* just as much, had it been the contrivance of a London physician or a country apothecary. “ Well, but there is nothing new,—we knew it all long ago ! ”

*Of course*, there is nothing new in sweating in a blanket, or lying in a wet sheet for an hour, followed by a cold bath, with half a dozen or a dozen tumblers of cold water taken during a walk before breakfast. *Of course*, there is nothing new in curing inflammation of the lungs, apoplexy, an attack of gout, &c. &c., with *cold water*, and that in a space of time that would be occupied by half a dozen learned doctors to hold a consultation or two on “*ways and means.*” *Of course*, all this, and much more, was known to all the doctors of all the colleges, of every shade and complexion,—even to all the members of the most worshipful *company* of apothecaries—*except myself*, who am an unworthy member.

I am grieved in remarking, that giving offence to some parties in making known any novelty or improvement cannot be avoided,—it is the fate attending the progress of things ; it has always been so, and is likely to continue for some time to come ; for instance, the railroad people offend the stage-coach proprietors and their drivers ; and any one introducing a railroad to health must



offend more or less *some* of the unthinking partisans of the old *slow coach method*.

I think, notwithstanding, that, without being too sanguine, I may hope, before I die, to hear the *wholesale* druggists declare that “*times is bad,*” and cry with wonder that “*waters is riz,* and *drugs is fell ;*”<sup>\*</sup> that young dentists before they get old will be surprised to find that there is not so much tooth-ache, and that whole sets are not destroyed at a sitting by mercury and calomel, as in the “good old times.” There can be no doubt that some medical men of all denominations will say most heartily—“Confound the water doctors !” and even that the old sick-room nurses will be angry, and lament that their “occupation’s gone.” As this state of matters cannot be avoided, we must console ourselves as best we may, and heal all their scratches with *water*.

Should it be thought that I have not been *sufficiently mild* in some of my observations, I

<sup>\*</sup> And I anticipate that by-and-bye we may hope that the *tempters to evil* and the venders of *evil spirits* will join in a similar chorus.

would refer to the extract I have made from the last lectures of Sir Astley Cooper, the reverberations of whose sledge hammer, against wholesale *consumption making* and *destruction of constitutions*, drown in their loud appeal the more gentle efforts of my *little alarum*. But still let me hope that by nurture and the stimulus of the great objects it advocates it will, increasing from day to day, at last make itself heard, and awaken others with more zeal, power, and influence, to join in the rescue. Lest it should be thought that I had dipped my pen in gall or bitterness, I have kept back some sixty pages written for the present volume; they were melancholy truths, which I since feared, by exciting opposition and the evil passions, would have retarded rather than advanced the object I have in view—the inducing medical men to take up and investigate the water cure. And should it moreover be discovered that there is anything in this work militating against any party or body of men, I have only to say, with my friend Dr. J. Johnson, that I am too independent to be influenced by any unfortunate interests or prejudices on this

or the other side of the water—*Salus populi suprema lex.*

I have read Mr. Claridge's work on the "Cold Water Cure," and I think I ought to notice it. As a non-professional man, it does him infinite credit ; he has collected a considerable body of evidence from the works of professional as well as non-professional men, and it will always be read with interest by the advocates of this system. Such men as Mr. Claridge ought not to be abused, for *he* could have had no *pocket* motive in its production ; all that can be said is that he is a little enthusiastic in these matters—a little enthusiasm does a great deal of good sometimes, when the motives are such as Mr. Claridge's. For myself it may be said, that I am going to *pocket* a great many fees,—no doubt ! and a great many more than I can possibly want for me or mine. Let other medical men follow my example, and I shall be delighted "to go shares" with them.

I am happy to learn that a clergyman of one of the largest congregations in London—a gentleman, I understand, of considerable talents



and powers of observation—has gone to Graefenberg, and is now going through the water cure. On his return, no doubt he will let it be known what he thinks of it. He said before he went that if he found the fiftieth part confirmed of what he read in Mr. Claridge's work, he should still more than congratulate himself on his visit; perhaps he will find something more. Should any suppose Mr. Claridge or myself have been gilding a little, I can only say it was a work of supererogation, like "gilding refined gold, painting the lily, or throwing a perfume o'er the violet." I am also glad to hear that several medical men, and many patients, have gone from here to Graefenberg. They, too, will add their confirmation.

18, *Sackville-street, Piccadilly*, 1842.



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## INTRODUCTION.

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“But words are things, and a small drop of ink,  
Falling like dew upon a thought, produces  
That which makes thousands, perhaps millions, think :  
'Tis strange, the shortest letter which man uses,  
Instead of speech, may form a lasting link of ages.”

BYRON.

THE salutary properties of water as a drink, its unequalled powers as a remedy in diseased states of the human body, its success in restoring health where the most judicious application of all other approved means had failed, is now so universally known, that there is no danger of its ever again being neglected, or falling into disrepute. So little fear is there of this, that, on the contrary, there is every rational ground for predicting its becoming from day to day better known and more appreciated. Studied by intelligent medical practitioners, its modes of application and administration will be more and more perfected, and the name of Priessnitz, through their medium, handed down to the latest posterity with honour, and with the benedictions of suffering humanity. Before entering on any further

observations, I do not think I can do better than make an extract from the preface of a popular work on this subject, written by J. Gross, a gentleman of much learning, and secretary at the court of Vienna:—

“Whoever you may be, my dear reader, who take up this book, whether of much or little learning, a drinker of wine or water, a friend of established things or of novelty, partisan of the allopathic, or the homœopathic system of medicine, or even a member of the profession itself, (provided that being such, you acknowledge no interest but that of humanity, of honour, or science,) I intreat you not to throw this work aside with indifference, whatever repugnance you may feel to grant me an hour of your time. It is a hundred to one, that when you have done, you will not pronounce absolute condemnation; a hundred to one that you will discover some truths to which you cannot refuse your approbation, and many novelties, perhaps, which you will consider worthy of reflection, estimation, and imitation. Should it meet with your approbation, either in part or altogether, I have, my dear reader, another and a great favour to ask; which is, not to content yourself with reading the book, and doing it the honour of putting it in a corner of your library, but to have the extreme goodness to speak of it to your friends and acquaintances, giving it to them to read, and contributing to its publicity, which is its due, containing, as it does, matter in which the whole of humanity is interested; referring to what is held most sacred, *the preservation of human*



*life, and the moral and physical well-being of man.* As regards myself, I have the confirmed conviction that it is owing to cold water I am still in existence, in the enjoyment, at this moment, of perfect health, notwithstanding my frail constitution.

“During a period of five-and-twenty years, I was extremely ill and suffering, a martyr without cessation to nervous symptoms, pains in the head, stomach, and lower bowels. It was in vain that I sought the advice of the most skilful and erudite physicians; I swallowed with full confidence all the medicines they prescribed for me. My prescriptions, during twenty years, would form a tolerably-sized volume, and consumed annually a large portion of my limited income. After so many fruitless efforts, I lost all faith in allopathic medicine. When I heard of the ingenious system of the great Hahnemann, I had recourse to it with so much the more avidity, that this new method, by its infinitely small and spiritualized remedies, joined to the *regimen* as rigid as it is rational, appeared to me more conformable to the human organization. In truth, my general health became much ameliorated, but many of my old and habitual complaints remained as inveterate as ever. This was the state of things when I heard of the marvellous cures effected by water, and I was determined to put the new system to the test—it succeeded beyond my most sanguine expectations. Past my fiftieth year, I now enjoy uninterrupted cheerfulness, and all my complicated ills have ceased. The effects of water have

given me a renewed love of life, and pleasure in existence."

Hundreds are now living, who tell the same history as the author I have just quoted.

When our attention is turned to the structure of the skin, and the important functions it performs in the animal economy, much of the wonder and mystery attached to the action of water, whether applied in chronic diseases, or in fevers and inflammations, ceases. I shall now give a slight sketch of what has been known, and the use that has been made of water, applied as a remedy, up to the time when the genius of Priessnitz, by its power of discovery, combination, and application, converted it into a system, the result of which has spread his fame through the whole of Europe.

I have before me a list of 700 works, from Hippocrates to the present day, some of them devoted exclusively to the remedial properties of water, others treating of it only as a part of a general subject. In some of these, miraculous cures by water are related, effected by charlatans and empirics, who, however, "*charmed*" the water to give it its healing properties; others only made use of certain waters supposed to have peculiar virtues, such as that of the Nile. The celebrated Baron Larray used it with this impression, in the treatment of gunshot wounds and other injuries, during Napoleon's campaign in Egypt. He marvelled at the results he obtained, but the thought never occurred to him to try any other river water. About two centuries ago, Baron

Paré, the first surgeon to the Hotel Dieu, at Paris, tried the effects of water in a variety of surgical cases, and he was so struck, that he believed it was really endowed with miraculous powers, and therefore improper for man to make use of it; he was induced to try it, in imitation of a charlatan, who was using it there as a charmed remedy. Dr. Macartney, the late professor at Trinity College, was a great advocate for the use of water applied to wounds, injuries, ulcers, and diseased states of skin, as well as for its powers when taken into the system, a singular instance of which I shall mention presently. He contrived what he called his water-dressing, which has been adopted by Liston, of London, and Symes, of Edinburgh. It is curious, that at the same time that Dr. Macartney prided himself on this, as an original and very valuable discovery, a humble and obscure peasant was practising it in the mountains of Silesia, with many novel and important additions. Dr. Macartney had a prophetic spirit, with respect to water. I heard him say, some sixteen years ago, that “if men knew the properties of water, and how to apply them, so as to produce all their effects, water would be worth more than all other remedies put together.” This, coming from one of the first physiologists and accomplished teachers of Great Britain or any other country, made a deep impression upon me at the time. He had another mode of applying water, which, though differing in some measure from that of Priessnitz, is still used on strictly physiological principles, and is, at the same time,



a powerful remedy,—it is that of applying water locally, in a state of vapour; this was superadded to his water-dressing.

I do not think it will be misplaced, to give the following case as an illustration, extracted from a work which I published some years ago:—

“When struggling with a Newfoundland dog, Dr. Macartney received a severe lacerated and punctured wound, inflicted by the teeth of the animal, which entered the palm of the hand, and on their abrupt withdrawal, tore with them a portion of the palmar fascia. As it may well be imagined, the pain was of a most agonizing description. As soon as possible, the Doctor plunged the hand into warm water, where he retained it until a supply of steam could be obtained, when he subjected it, by means of his simple apparatus, to the operation of aqueous vapour for many consecutive hours. Within half an hour after the immersion in steam, the pain was completely removed, and the learned professor was accustomed to add, ‘I have not had *a single unpleasant sensation* produced in the part from that hour to this.’ The wound was afterwards treated with his water-dressing, ‘and it healed in a short time, without *any of the phenomena of inflammation*, and without any confinement or inconvenience.’”

This is the kind of wound that gives locked jaw so often: with this treatment it can never occur. I shall now mention a case in which Dr. Macartney illustrated the effects of a large quantity of water taken internally.

It was his porter's child, who was affected with St. Vitus's dance, accompanied with inflammation of the elbow and hip joints; she was made to drink during the day nearly a gallon of water, taken in small quantities, and at repeated intervals; all the symptoms gradually subsided, so that the next day her diseased state was not to be detected. By giving her animal food and a full diet, all the symptoms returned with severity. This case was shewn to the numerous students, and the same process repeated. The diseased state I have just mentioned depending in a great measure upon, or complicated with, an inflammation pervading the mucous membranes of the stomach and alimentary canal, accounts for the rapid changes produced by the opposite treatments.

When we consider the structure of the skin as the external covering of the body, and of its continuation internally as the mucous membrane of the stomach and bowels, or internal sentient surface, and of the important functions they perform in the animal economy, much of the mystery attached to the action of water ceases. The whole of the surface of the body may be looked upon as a mass of nervous matter, kept together by other tissues, and interwoven with infinite minute blood-vessels, distributed for their reparation and nourishment; so that the point of a needle cannot enter without wounding a nerve or a blood-vessel. The internal surface, or mucous membrane, is analogous in its structure.

These extensive surfaces influence the whole mass of

the circulating fluids, and the healthy or diseased state of every organ of the body. If the effects of water be doubted, sprinkle a little water in the face, apply it with linen on an inflamed pimple, or let it fall drop by drop on the forehead—the phenomena arising from these experiments, minute as they are, will explain many of the potent results to be obtained by water: the one awakens, the other removes all pain and inflammation; the last reduces the vital powers to the lowest ebb, and if continued sufficiently long, kills. Water, taken internally, produces many varied and important effects; but this is not the place where I can enter into details of its physiological action, externally or internally applied.

Many celebrated medical practitioners have known and tried the effects of water in fevers, particularly Dr. Currie, of Liverpool, but their modes of applying it were very imperfect, compared with that of Preissnitz; and although Currie obtained great success during an epidemic and very fatal typhus at Liverpool, it fell into disuse.

A number of institutions for the treatment of patients on the plan of the “Water Cure,” have arisen in different parts of Europe, the number of them now approaching to nearly a hundred. So popular a system, it was but natural to expect, could not long escape the hands of *speculators, charlatans, and impostors*. I visited several of these institutions, and it was with deep regret that I found my fears verified. A gentleman at Nice told a patient I was attending there, that he had been



at one of these establishments, and that he thanked his good fortune in having escaped with his life; but that since he left, he had heard it had been shut up. It is thus that an excellent system is brought into disrepute. Many aspirants visit Graefenberg for a few days—others trust to their fertile imaginations, never having seen a case treated, fix on a locale, and commence the water cure. A Russian lady whom I knew and left at Graefenberg, with her sister and two children, “*making the cure*,” told me, that a few months before her arrival there, she had lost a child by scarlet fever. She had read several works on the water cure, and having many friends who had been at Graefenberg, her confidence in the effects of water was unlimited; and she therefore called in two persons who professed to treat by water. One of them she heard afterwards had been at Graefenberg only one day, on his return to Moscow, where she lived; the other she discovered had been at no institution at all. In a short time she perceived that all was not right, and being told to apply a fomentation to the throat, she asked if it should be hot or cold; they hesitated, and at last said it did not signify which. Knowing better, she lost all confidence in them, changed the treatment when too late, called in two physicians, and lost her child. These *villanous traffickers in human suffering*, whatever Protean form they take, whose diabolical occupation, marked by an intrepidity and recklessness which no feelings of commiseration can mitigate, no exposure deter, no *human sacrifices* arrest, deserve

and ought to have the opprobrium and anathema of every man who wishes well to his kind.

It may be looked upon as one of the greatest derelictions of duty on the part of the medical body generally, that they have made little effort to enlighten mankind by reasonable arguments, proving the danger they run, and the groundless nature of their trust in believing in the promises of impostors, and in the good effects of their remedies. What can be a greater proof of it than the *mode* in which Morrison's pills are taken? With great foresight of man's weakness, and the prevalent ignorance in these matters, they are called *vegetable* pills, directing attention at once to their supposed *innocence* and *simplicity*. This is a grievous mistake, for in the vegetable world are contained the most virulent and deadly poisons. These pills are composed of purgative vegetable drugs, all of which are used in the practice of medicine: their composition is well known. Some of them are of a most virulent and poisonous nature, and used with great care and discretion by most medical men. The mode of taking these pills is of a most *frightful nature*. After being taken for a time, the tone and sensibility of the extensive surface of the stomach and bowels becomes so altered from its natural and healthy state, that immense numbers may be swallowed without producing their first action on the secretions. I have seen a great many cases of the fatal results of this purgative system. *At first* two or three of these pills act on the bowels, and relieve the patient as well as would be done by most

other drastic purgatives, but this is a false relief; *they make their own work*, and must be repeated, still increasing the dose, till the nervous system and the powers of the digestive organs become irreparably destroyed beyond the power of any human art to restore.

An error which has existed too long is the abuse of applying all remedies to the stomach, and through the alimentary canal. Nature *relieves herself* of refuse matter, or superabundance, in something like the following ratio, which has been pretty accurately ascertained by the experiments of several physiologists:—One of them weighed himself, and all that passed from the body every day for thirty years, and he found that more than half of all he took passed through the skin, many times as much by the kidneys as by the bowels, part flying off by the breath. Thus we see that, in fact, there is very little secretion by the alimentary canal, even part of what is thrown off being undigested matter and refuse, which the apparatus of nutrition had refused to take up. With these glaring facts, it is a matter of the greatest surprise that the skin should hitherto have been so much neglected, and that all the attention should have been directed to physicking the *unfortunate* bowels. The drugging system in England has arrived at such a pitch as to merit the reprobation of every man who wishes well to his profession. Many independent men have already pointed out its pernicious consequences to the public health, as well as its injurious results to the professional character. The injudicious



*system* of being paid for drugs entails with it the *suspicion* in the patient (and they do suspect, and say it, too,) that more is sent and given than required, lowering the most honourable and useful profession to a wily and disgraceful craft. The professional man, after years of anxiety, labour and expense, must be remunerated, and this cannot be done without his time, care, and advice being paid for, or by sending more medicine than he knows is necessary. The patient is the greatest sufferer in every way, paying more than he would have done in fees, and imbued more or less with the false notion, that so much medicine is required, so that *many*, when a more rational system is pursued, fancy "there is nothing doing," and cry out "there is no medicine to go on with." It might be supposed that our medical colleges would aid in removing this and many other flagrant abuses. But no; from such quarters there can be no hope; for as long as their uninfluenced control exists, their solicitude for the well-being of the profession will be that of an unjust step-mother to her children. The following fact, apropos to colleges, I shall take the liberty of relating:—Two days ago, I saw a hen surrounded by her numerous chickens; they loved her as their mother, getting under her sheltering wings, and happy in her protection. To-day at noon, the scene was changed—her love was gone; pecking the little ones, with ruffled wings, she screamed, "My care and *cheering* heat I'll grant no longer." Entreating still with artless cry, and still refused, THEY LEFT HER IN A

BODY. This eve, I found them huddled close together, chuckling with mutual love and warmth, no longer wanting the fostering care denied by the cruel mother.\* The uninitiated might imagine that a system so vaunted as the "water cure" would find its entrance into, and be tried in, the hospitals, particularly in cases of fevers and inflammations; but they know little of the management of these matters who might think so. On one of my visits at Vienna, being in one of the hospitals, I inquired if this treatment had been tried in any way. I was told that cold water had been used in a case of diseased joint, and had failed, and that nothing more was thought of it. On further inquiry about the case, I found that it was a chronic disease of the knee-joint, to which most truly cold water had been applied—the very worst thing that could have been done—causing a congested state of the vessels, benumbing the part, and applying cold till it was nearly frozen, and increasing the morbid state by the violence of the reaction: this was called "trying the water cure." But in the case that was described to me, even a rational local treatment would not in itself have been sufficient without a more general application of "the cure." It is thus that an admirable system is left unappreciated. But in England, the country of countries, the land of liberty, of intelligence, of the rapid march of intellect, "where man is the lord of his kind," the same thing would, of

\* "You have not as many brains as a chicken."—Old Saying.

course, not take place. I will not attempt to solve this difficulty, but submit to the reader the following extract from Sir Astley Cooper's last course of lectures—a gentleman whose authority is of the greatest value, and whose loss cannot be too much regretted:—

*Extract from Sir Astley Cooper's Lectures.*

“In the first place, gentlemen, let me observe to you, that no greater folly, and indeed *crudelty*, can be committed than that of giving mercury to patients for the cure of this disease. A man who gives mercury in gonorrhœa really deserves to be *flogged out of the profession*, because he must be quite ignorant of the principles on which this disease is to be cured. To give mercury to a young and irritable person, who is probably constantly exposed to vicissitudes of temperature, for a disease which *does not require it*, (thus exposing the health, and even *the life of the patient to danger*,) is, in the present state of our knowledge, perfectly unpardonable. *It is lamentable to reflect on the number of lives which must have been destroyed by consumption and otherwise*, in consequence of the imprudent exhibition of mercury for a disease which *did not require it*, which prevailed among the older surgeons. At the present time, however, a surgeon must be either grossly ignorant, or shamefully negligent of the duty which he owes to the character of his profession, and to the common dictates of humanity, if he persists in giving mercury for this disease. Let those persons who suppose that it



can be cured by mercury, go round our wards, and see whether mercury has any effect on that disease. Look, gentlemen, at a hundred patients in our lock wards, many of whom come into the hospital with syphilis and gonorrhœa; and many, I am sorry to say, who have only gonorrhœa, but who are invariably carried to these wards. What is the *miserable treatment* of these patients? You are aware, gentlemen, that I scarcely ever enter the lock wards of the other hospital; when a particular case demands my attention, I have the patient removed to a clean ward. I will tell you why I do not enter these wards, gentlemen: I abstain from entering them, because patients *are compelled to undergo so infamous a system of treatment*, THAT I CANNOT BEAR TO WITNESS IT. *To compel an unfortunate patient to undergo a course of mercury for a disease which does not require it, is a proceeding which reflects disgrace and dishonour on the character of a medical institution.* No consideration shall induce me to repress my feelings on this subject; no authority shall restrain me from giving full expression to those feelings. As long as I continue a surgeon of Guy's Hospital, I will endeavour to do my duty; but I care not if I continue a surgeon of that hospital another day. I do say, that the present treatment of patients in these hospitals, by putting them unnecessarily under a course of mercury for five or six weeks, is INFAMOUS AND DISGRACEFUL. The health of a patient is, perhaps, *irremediably destroyed* by this treatment; and, after all, not the slightest effect is

produced by it on the disease. If he is cured, he must be cured by other means. If you go to a patient in these wards at the end of his course, and ask him how many times he has used mercury, he will generally answer ‘twenty-eight times.’ If you ask whether he is salivated, he will tell you that he spits *three pints a-day*; but ask whether his disease is cured, and he will reply, ‘No, I am as bad as ever.’ His complaint is not in the slightest degree affected by the mercurial course to which he has been so unpardonably subjected. When so infamous a practice prevails, I cannot satisfy my own feelings by resorting to *milk and water language*; every man of common feeling and honesty is bound to speak out on such an occasion. It is wholly unnecessary to give mercury in any form for this disease.”

Notwithstanding this forcible appeal of Sir Astley Cooper, which must have been preceded by much persuasion and many entreaties, there was no man in the profession more liberal to his brethren, or more ready to do them any personal service; his sole object in the above remarks, was the removal of an error and an important abuse, and to prevent the destruction of human life; and this reminds me, that as my humble attempt for the same purposes will fall more particularly into the hands of the admirers of the “water-cure,” I am bound to tell them that great injustice is committed by many misinformed advocates of “the cure,” by the opprobrious epithets they apply to our profession generally—mistaking the errors and delinquencies of some as

typical of the whole class. I would tell such persons, that innumerable medical men are, and have been, the brightest ornaments of human nature; devoting their lives to the cultivation of the sciences bearing upon, and disinterestedly occupied with but one great aim—the relief of human sufferings. The annals of medicine are rife with these philanthropic benefactors, whose lives were passed in study, in attending the sick poor, and in the disgusting and health-destroying duties of the dissecting-room, and whose existence was often sacrificed to their unwearied labours. Often unrewarded were they, but still stedfast in their purpose, though many of their more fashionable brethren, the creatures of accident, of patronage, or of wealth, without their talents, genius, knowledge, or devotion, pointed out a smoother and more flowery path.

Because a better system is discovered, there is no reason why, in many cases, medicines should not *still be used, and used with benefit*. All medical men are not mere “*drug doctors*.” The knowledge acquired by the study of anatomy, physiology, and pathology, is *indispensable* to the full understanding of the “water cure,” and to its practice, without frequent errors. It is true it has been discovered and brought to extraordinary perfection without this knowledge; but Priessnitz did not bring it to its present state without twenty long and patient years of practical study of the powers of water, of the vital phenomena, and of those of disease, however imperfect his knowledge may be. But



Priessnitz is a genius,—an extraordinary case; one of those isolated instances which occur so seldom in the history of man. Let not, therefore, other uneducated persons attempt to practise the water cure, because Priessnitz has practised it. The power of genius is no rule for ordinary mortals.

Other non-professional men must not hope to be a Priessnitz, nor professional men themselves hope to understand “the cure,” without making every effort to allay *the force of habit*, AND THE PASSION OF PREPOSSESSION. One of Priessnitz’s great peculiarities is his tact; which is nothing more than his power of putting himself in the position of the patient: he takes his physical calibre at once, and anticipates in his imagination what the patient can bear and respond to; and this, added to his extensive knowledge of the powers of water, lets him into the secret, in many cases, of the effects he can produce. This is a valuable attribute, and indispensable to a “*great*” practitioner; though, when unaided by a knowledge of every *mechanical* and *rational* means of ascertaining the precise state of all the organs, it must frequently be followed by error. This knowledge, or perception of the effects that water will produce by the response of the animal machine, is supposed by the unenlightened to be a “clairvoyance,” a mode that Priessnitz has of peeping into the internal recesses of the bosom, and into all the windings of the abdominal cavity. He is supposed to possess this in a high degree; which is, in fact, the case, though it admits of a more

rational explanation, which, by the way, the devotees of the marvellous will not hear of. This *familiarity* with water is absolutely necessary to using it with safety and effect, or appreciating all its powers. To obtain this desired end, no better means offer themselves to the physiologist, than for him to undergo himself all the treatment for a length of time, to which there can be no earthly objection, under any circumstance I can imagine ; for, if ailing, it will not be thrown away—if well, it will be a salutary and an amusing pastime.

With all Priessnitz' sagacity, it is a matter of surprise that he has fallen into an abuse which *interferes greatly* with his excellent cure. This is allowing vegetable and animal matters at his table which are of an indigestible and pernicious nature, such as pork baked to a cinder, sausages, sour kroust, salted cucumbers, and bad pastry—"let me not think on't,"—articles of diet which, even in health, should be avoided, when any food of a more salutary nature can be obtained. What, then, must be the effect when the majority of his patients have, complicated with other complaints, some disease or derangement of the digestive organs. But a more flagrant error still, is the *quantity* which each person consumes. There is a kind of furor who shall devour most. It is true that with the "water cure" every person can eat *infinitely more* than they could under any other circumstances. But this is not enough ; indigestion may take place, and excess be committed in the water cure as well as elsewhere. Water only coun-

teracts the evil effects. But the point I am convinced of is, that it *interferes* with, and *retards* the final cure of the majority of the patients at Graefenberg. I possess abundant illustrations. Priessnitz is himself so strong and hearty by his mode of life, that *he does not know he has a stomach*—the truest sign of a healthy state—and not *feeling* with his patients, he forgets, or, from some mystification of reasoning, overlooks the fact, that others are not in this enviable position, or takes an unphysiological view of the influence of an over-loaded stomach on the whole body, on each of its organs, and on any disease with which it may be affected.

The celebrated Abernethy was the first in England to lay great stress on this, *and this moderation must be introduced into the water cure*. He was a great advocate of temperance, and violent with those who did not practise it, calling them to their face the dirtiest names he could think of; but though always suffering with his stomach himself, he did not, I believe, adhere to the rules he laid down for others. This, no doubt, made him more irritable. He says, in his quaint and characteristic manner, “Oh! if I could put all the disorders of the digestive organs to rights, I should discover a better thing than the philosopher’s stone.” IT HAS BEEN DISCOVERED!—and in *water*, and in *temperance*, we find the long-sought secret of health, length of days, and innumerable blessings. Water was given to man by a beneficent Creator as his drink, before his wayward genius extracted from the fruits of earth the fatal spirit,



which, though “making glad the heart of man,” is, from its indulgence and abuse, working upon the evil propensities within him, converted to his destruction, making him suicidal of his health and peace, diverting his nature from the cultivation of Christian virtues, and drawing him full often into the depths of poverty and depravity, destroying his reason, curtailing his existence, and levelling him with the brutes.

Yes—**TEMPERANCE**—safe-guard of *health*, peace and content—and *health*, thy first-born, offspring of thy adoption—what do we not owe thee, and how shall we value thee most; preserving the harmonious play of all the wondrous instruments of the human body, regulating and attuning the mind to the divinest aspirations! Thy cup, overflowing with innumerable blessings, is poured out for all who will receive thy gifts; making man in concord with himself, and in harmony with his fellow man.

“O blessed health! thou art above all gold and treasure! ’Tis thou who enlargest the soul, and openest all its powers to receive instruction and to relish virtue. He that has thee has little more to wish for; and he that is so wretched as to want thee, wants everything with thee.”

In advocating temperance as *part* of the cure of diseases by water, and as a means of preserving health, and superseding the necessity of any cure—as the sure mode of avoiding pain, and gaining time to execute any plan of life—let it not be supposed that I would

refer only to the baneful effects of the *maddening alcohol*, or the *besotting beer*. Far, far from this. To realize all its certain and imaginable results, it should embrace the whole economy of every sublunary possession—even to the most exalted attributes of man. From his inherent qualities, destined to progress, this perfection of his earthly existence can be obtained, and it will come. On its advent, misery, guilt, and disease will leave the earth. The demons of envy, hatred, and malice, *uncharitableness corroding the heart*, silly pride, and vain glory, and their offspring, lust of gain, will fly the breast of man. *Blest with abundance and a frugal board*; passing his time in useful and health-bestowing labours, in the luxurious enjoyment of benevolent feelings, unchanged and unchecked by moral or physical pain; contemplating, with an understanding mind, the wondrous works of animate and inanimate nature, he will ripen the fruits of the heavenly mission to earth, and realize the most enchanting dreams of the philanthropist.

Oh! the MIGHTY POWER of a *temperate people*, like Albion's guardian angel, raising its celestial head and taking wing on its snowy pinions, bursting the bonds of *custom* and casting away the shackles of *prejudice*. On! on! to distant time—at every flight in its heavenly career, approaching nearer, nearer still to perfect good. Still on! on! till all mankind, with one voice of love, one embrace of universal brotherhood, lift up their hands to heaven with thanks and praise.

HISTORY  
OF  
VINCENT PRIESSNITZ,  
HIS WATER CURE,  
AND DOINGS AT GRAEFENBERG, ETC.

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Morgens in die Kalte Wanne springen,  
Wenn es regnet zu den Douchen klimmen,  
In der Kotze schwitzen, in dem Wasser sitzen,  
Nasse Tücher tragen, Kopf- und Fussbad haben,  
Dazu Krisen, Drüsen und Geschwüren—  
Welche Lust und welche Pein,  
Auf dem Graefenberg zu seyn!

VINCENT PRIESSNITZ, the peasant of Graefenberg, who has gained for himself an European celebrity by his genius and indefatigable industry, by making the most valuable discoveries, and working out their benefits, was born in a little wooden cottage, where his father lived, the cultivator of a few acres of ground. Till his eighteenth year he worked at the plough with naked feet, but even at this early date he lived with *temperance*, which was not the general character of his countrymen. He thus made firm the foundation of a good constitu-



tion, which has enabled him since, still obeying the dictates of prudence, to give solution to his problem, to make his incessant labours a pleasure, and the opposition he has met with a stimulus to exertion.

About this time, a wandering Hungarian, venerable with age, paid the district frequent visits, curing the lower animals with secret remedies, and the external injuries of man with water, *charming* the crystal fluid with magic spell. The father of Vincent “loved this man, oft invited him,” and knowing the genius of his son, intreated this ancient friend to make his boy the partner of his skill. ’Twas done! and Vincent Priessnitz, inspired with distant views, determined, from that day, to prove that water was *a gift from heaven! a panacea for human ills!* Progressing in meditation and in knowledge, to try his faith, a waggon passing over his body, broke his ribs, and put his life in danger. Several doctors from the neighbouring town, running post haste to the injured youth, declared his case was hopeless. He, not fruitless in his knowledge, when sense returned, smiled at the dictum of the learned men. His healing balm at hand, he straightway placed it on the injured part; with tact and skill replaced the broken bones, and soon returned to useful toil. Fame, on her unclipped wings, soon carried abroad the faithful tale; and soon the peasant’s son, leaving aside his daily work, was called to cure the hundred ills of injured health. The doctors, cruel doctors, still benighted by custom and heartless gain, looked not on this with pleasure. “What!

shall this hind, this labouring hind, destroy our fees?" they cried; and, straightway, in a land where man is not free, the "wasser cur," by senseless law and power absolute, was made to cease. The intrepid peasant, strong in his convictions, stooped not willingly to the unjust decree. "If men are the slaves of power, water is free," he thought. "To drink thereof, to wash, is granted to the serf; and human law, shackling the body and the thoughts of men, cannot arrest the stream!" On this, and prompted by his grateful friends, he called on justice and on common-sense to add themselves to law, and grant him still the power to use the simple means, which, in his hands, made man another man. 'Twas granted; and now, with years of observation, and care of ailing man, he stands pre-eminent in knowledge of the virtues of this sacred gift; surrounded by helpless pilgrims from distant lands in search of health—Europe resounds with all he does. My true tale is told—he lives in usefulness and *peace*, his cure beyond the reach of *law*. Many of the details of this history are sufficiently curious to merit insertion.

Vincent Priessnitz is now forty-three years old, in perfect health, built with broad shoulders, robust, without any tendency to fat; his height about five feet eight. As I have said, he has great tact and penetration, with decidedly the higher order of intellect. According to the phrenological doctrine, he has the organs of intellect "par excellence;" comparison and casualty well-developed; firmness, combativeness, and destruc-

tiveness, large. In short, it is one of those cerebral conformations, which a phrenologist would say was necessary for a leader, or the founder of a great system. The expression of his countenance is intelligent and inquiring; he has a *general* appearance of firmness, which he possesses, in fact, to the degree of *obstinacy*. By an accident, his front teeth were knocked out, and he has the habit of keeping his lips closely compressed, which adds to the natural expression of firmness, so much developed by exertion and opposition. With all this (and it appears almost a contradiction,) there is a restlessness in his eyes, giving him the look of suspicion, almost of cunning. One thing struck me particularly as curious; at a little distance he appears a very large man, but as you approach, he becomes gradually less and less to the eye, till when you are quite near, his features are small, and his person of moderate dimensions. He is excessively reserved in his general deportment, and speaks as little as possible, answering only direct questions; otherwise he is mute, seldom volunteering an observation; this habit has been forced upon him, and he has shewn his wisdom in adopting it, as he has in many other things; it imposes upon, and keeps his numerous and mixed patients at a distance, and prevents his being worried to death. It has its inconvenience, though, when carried to excess, for he frequently omits to give the necessary instructions, when the patient forgets, or does not know how to ask them. For more than twenty years he has not drank anything but milk for



breakfast and supper, and water as his ordinary beverage.

When he first commenced the curing of diseases by water, his wife had not much faith in it; at all events she made him promise that a doctor should attend her first child, which was *a boy*. The child fell ill, some doctors were in attendance, and it died. From that day, although he has had seven children, *all daughters*, no doctors have been called in; they have gone through *all* the ailments of childhood—measles, hooping-cough, scarlet fever, &c.—without giving either him or her *one moment's apprehension*. I have seen him treat one of his children in fever. The child being from home, had been neglected, and when brought home had delirium and fever. I saw the mother going in and out (having the superintendence of provisioning 500 guests), shaking her keys, and looking unconcerned, and even cheerful. She committed a blunder at the beginning of the treatment, Priessnitz having left it to her. She had taken the child out of the bath the first time too soon, moved by its entreaties, and thus made work for three days of what might have been done in one. Priessnitz said there could be nothing more culpable in the treatment by the water cure than this mistaken kindness. However, when he is ill, his wife “doctors” him; he gives directions, and tells her to see that they are carried into effect.

Some years ago, before his reputation was established, in the depth of an almost Siberian winter, he went in a

small car to see a patient in a distant village; he was then requested to go on further; so that by the time he reached home, his lower limbs were frozen. The next day, being very ill with swelled legs, and inflammation coming on in the stomach and bowels, with very dangerous symptoms, he said to his wife, "I must immediately go into the shallow bath and be rubbed, or I shall be laid up with a dangerous illness, perhaps a fatal one. Do you see it done!" He remained between six and seven hours in the bath, and the next day was out of all danger, and nearly quite well. Is it then astonishing that he should have such confidence himself, or inspire his patients with the same feeling?

When he commenced his "water cure," he met with great opposition from the medical men of the neighbouring town, was denounced as a charlatan and a conjuror, and anathematized from the pulpit; and I was told there was an attempt made by some of the peasants to assassinate him, believing he had sold himself to the author of evil. He was summoned before a tribunal, whose verdict compelled him to desist from practising. A laughable case occurred of a miller he had cured of gout: the doctor said he had cured him, and the man said Priessnitz had. The three culprits were placed before the judge, who, turning to the patient, who had been an old tippler, asked him, "Which of these two men cured you?" "Why both, your honour," was his reply; "the doctor relieved me of my money that went for the drink, and Priessnitz of my gout."

His persecution, however, by the faculty did not end here; the number of his patients daily increasing, his fame spread to Vienna, and persons were sent to analyse the water, to discover its *mystic virtue*; so true is it that men will not believe that great effects can proceed from simple causes. The water was found to be of the purest description. They stared at each other for a time, when the idea struck them, "It must be—yes, it is in the sponges he uses, that he hides his secret remedies." The sponges were analysed, and there, too, alas! alas! nothing was found. What was to be done next? "There is nothing for it but to stop 'the cure.'" This, in fact, took place; but it did not last long. He appealed against the decision, *backed by his patients*, who said they *would* drink water, and the prosecution was obliged to be given up. Then the paternal government of Vienna sent a commission to inquire into the real state of affairs. Fortunately for Priessnitz and for the water cure, old Baron Turkheim, who is at the head of the medical department of the empire, was also at the head of this; a man celebrated for his independent spirit, his great learning and scientific acquirements, and his love of freedom, which, unfortunately for his countrymen, he is *obliged* to keep a good deal to himself. He staid some time at Graefenberg, and on his return to Vienna, being at a medical society, he was asked what he thought of the new *charlatanism*; he replied, "Priessnitz is no impostor; he beats us in his prognosis, and is more successful in his practice. *Believe me, you have much to learn from this 'countryman.'*" This made the sages of



Vienna still more angry and violent against the “water cure” and its founder—shutting up the avenues of their understanding, against the evidence of their senses—notwithstanding the accumulated facts which presented themselves among their patients, who, leaving them with little hope, returned in perfect health. Many of these gentlemen adopted a novel mode (which I was told of at Graefenberg by the parties themselves) of giving their refractory patients *hydrophobia*. Assuming the most pathetic and melancholy length of visage, they wished their patients farewell. “Farewell for ever, you will be killed; we shall never see you again. You will *never come back to us* from that hor-r-rid Graefenberg.” This was often repeated, with a roar of laughter, in which I joined ‘most consumedly.’” As related in German by some of the facetious ones, who were getting well in a canter, it was irresistible. It is interesting to see the gradual increase of the patients, and I have appended a list, from the year 1831 to 1841. By this time it must be recollected nearly 100 other institutions attracted their share of patients.

Year.	Patients.	Deaths.	Age.	Disease.
1831	...	62	...	1 officer ... hectic fever, consumption.
1832	...	118	...	0
1833	...	286	...	2 { a child... 6 ... scrofula, &c. and convulsions. a man ... 58 ... disease of the chest.
1834	...	286	...	3 { a man ... 53 ... cramp. ,, ... 59 ... liver complaint. ,, ... 20 ... hectic fever.
1835	...	342	...	2 { a man ... 65 ... apoplexy. ,, ... 35 ... internal gout.

Year.	Patients.	Deaths.	Age.	Disease.
1836	...	469	...	3 { a man ... 36 ... pulmonary consumption. ,, ... 53 ... cramp in chest. a woman 26 ... hectic fever, inflammation of bowels.
1837	...	590	...	1 a man ... 56 ... pulmonary consumption.
1838	...	800	...	6 { a man ... 85 ... abscess breaking internally. ,, ... 26 ... pulmonary consumption. ,, ... 44 ... ditto, ditto. ,, ... 50 ... abscess in liver. a woman 38 ... cramp. ,, 50 ... apoplexy.
1839	...	1400	...	6 { a man ... 60 ... diarrhoea. ,, ... 31 ... hectic fever, cancer. ,, ... 42 ... consumption. ,, ... 48 ... hectic fever and abscesses. ,, ... 45 ... consumption. ,, ... 56 ... apoplexy.
1840	...	1576	...	7 { a man ... 23 ... consumption. ,, ... 25 ... ditto. ,, ... 50 ... supposed disease of heart. ,, ... 57 ... cancer and hectic fever. ,, ... 29 ... diseased kidneys. ,, ... 53 ... supposed apoplexy. a woman 37 ... had not commenced the cure.
1841 above 1400	...	...	...	8 { a man ... 25 ... hectic fever. ,, ... 53 ... cancer of stomach, vomiting. ,, ... 40 ... consumption. ,, ... 50 ... disease of heart, lungs, and stomach. ,, ... 24 ... mercury and syphilis. a child... 4 ... scrofula, enlarged mesenteric glands, and suppuration. a woman 39 ... cancer, hectic fever. ,, 45 ... cancer of the stomach, hectic fever.
		7219	39	

The surgeon of the little town, who states the nature of the fatal diseases, is not the first pathologist extant, so that I cannot answer for his accuracy. Some are put down as consumption, or wasting: I have, however,

ascertained that they were nearly all hopeless cases on their arrival—persons who insisted on remaining, when Priessnitz unwillingly acceded to their entreaties to try and relieve some of the symptoms. It will be seen that a number are cases of pulmonary consumption, cancer in its last stages, and some cases of apoplexy, which are very easily accounted for. They all arise from what I shall call, for want of a better name, *stupidities*, gormandizing, sweating, or lying in the wet sheets with crammed stomachs, and sometimes a little sly tippling, &c. In ten years there are 7219 patients registered, and 38 deaths. These are all strangers who came from great distances to consult the peasant; the natives are not included. Does not this speak volumes for the water cure, when we consider that the majority of the 7219 patients were cases considered very bad or hopeless by their medical attendants, and that the 38 cases of death were most of them of a nature utterly hopeless? There have been some hundreds lost in Nice this winter by scarlet fever, a disease that in its worst forms is considered trifling by those who understand its treatment by water, by which a case cannot be lost except by the most stupid negligence and inability; and yet many medical men can go on smiling at the water cure, and hugging their farrago of drugs and tisanes.

To resume the current of our history. Medical men were now sent by the different continental governments, to examine and report on the water cure, and if favourable, to erect similar institutions. Some appreciated it,



and establishments arose in different parts of Germany. In Russia it was also patronized by royalty, being considered by the emperor "the best thing that was ever invented," as I heard from one of his generals. A Doctor H—— was sent by the Bavarian government; during his stay, his conduct was so opposed to the method, and so unguarded, that Priessnitz was obliged to request him to leave the establishment. *He afterwards formed an establishment of his own*, which he subsequently relinquished, because it did not answer his pecuniary motives, and because it did more harm than good, and the patients left him. Soon after, he published a work against the "water cure," and inserted a violent article to the same purpose in the "Munich Gazette." The work was answered by Doctors Müller and Dieterich; their critique goes to shew the melancholy fact, that in his lucubrations against the "water cure," he had displayed a deplorable want of knowledge of the first principles of the practice of medicine. What he said of water was hardly worth refuting. The article he wrote in the Munich Gazette was answered by the Venerable Dean of the Chapter of Ratisbon. I mention this to shew *how patients* take this matter up. He (the Dean) had been a patient at Graefenberg, and was cured, at an advanced age, of many ailments. In a letter to a friend, which he published in the same Gazette, he relates his own cure, draws a number of interesting comparisons, and must have made poor Doctor

H—— repent his hasty mistake, and his unfortunate speculations.

About this time, a Doctor E—— published a work against Priessnitz, more personal against the *man* than against his method. This was taken up by old Doctor Kuppricht, of Breslau, a celebrated practitioner, who shews this gentleman very clearly, that he is in a very similar state with Dr. H——, (whom I have mentioned,) and that his personalities against Priessnitz had not a good motive—Vincent had not been very polite to him.

Priessnitz is decidedly a great favourite, and has the greatest influence with his patients. The ladies, from the reigning duchess, princess, baroness, downwards, dote upon him; they go so far as to embrace him—once, before parting. This devotion on the part of the ladies is not to be wondered at, when we consider that many arrive at Graefenberg with a “green and yellow melancholy,” not very amiably disposed, pale and wan, dragging one reluctant extremity after the other,—and leave it with florid complexion, with vivacity, and an *amiable temper*, a rounded form, and an elastic tread. These they know to be the greatest elements of beauty and of attraction, and they are grateful.

Priessnitz is not *positive* in his injunctions against the taking of wine. There are cases in which, he thinks, wine as a cordial might be of benefit; in fact, that it is a “good familiar creature” when well used, understand-

ing always that the wine be *good*.\* When wine is abused, and of fictitious quality, it is the demon of evil incarnate, for the mind and for the body. Port wine, in particular, requires great care; every intelligent gentleman knows that too much “black strap” takes his legs from under him, destroys his cheerfulness, and makes him ill “in toe-toe.”

It is this tendency to abuse the taking of wine and other stimulants, as well as its being always quite superfluous, that makes us temperate folk forbid it altogether. Wine exactly resembles Mr. Morrison’s pills in one respect—it *makes its own work*; taken to-day, it brings on the necessity of repetition to-morrow, and so

\* There are very many people who are not aware how much bad wine there is drunk in England, how easily the falsification is made, and how pernicious it is. Out of a book on wines I extracted a receipt for counterfeiting port wine, and, by repeated experiments, and several additions, I made a liquid so exactly resembling port wine, that I can deceive even the best judges when they are not on their guard. The expense of making it is about 6½d. a full-sized quart bottle. It produces the sensations induced by port wine more quickly than that by the pure juice of the grape, and the majority would think it a better and warmer wine; but though not exactly poisonous, its effects are very deleterious after a time, producing slight fever, a gnawing, and a sense of sinking at the stomach, attended, soon or later, by what may be called a *London particular liver complaint*: this I have seen in dozens who had been long drinking this horrid stuff. To produce a deep crust on the bottle, a bee’s wing, and to make the cork appear as if it had been several years in the bottle, is a very simple process. I should like to shew the public how easily all this is done, but I fear it is a receipt that would do more harm by being made use of, than good by the caution which it would hold out. And moreover the present imitations are unfortunately already too good to be easily detected.



on, increasing the dose. This must be said for temperate men—they are the only real jovial fellows, *always* up to the mark, never sad, though sometimes serious. We sleep well, and eat well, and are never in bad humour with ourselves or our fellows. It may be asked, how is a dinner to go off without wine? and I dare say the proposer of the question would consider it a poser, and unanswerable. But I would, with all due deference, reply, that I have sat down to many, many dinners, where there was abundance of wine of every, and the best description, and they were “as stupid as stupid could be,” an infliction instead of a pleasure; a regular undertaking to get through the business without yawning; nothing to compensate in any way for the fever, head-ache, &c. &c., which so often follow this eating and drinking too much. On the other hand, by way of contrast, I may say that the gayest and most cheerful dinners of which I ever partook were, where there was no wine; no one looked tired or ennuyé; all seemed to enjoy the plain but good things before them, followed by no malaise or regrets; health, appetite, and buoyant mirth were the order of the day.

However, I cannot hide from myself that this desirable state is not so easily acquired—it requires time to accomplish it, or the “water cure.” Suppose a gentleman with a wife and a large family, and his affairs more than a little embarrassed, returning home through the cheering atmosphere of London on a November day, after an anxious and a hard day’s work, dry, but without appe-

tite, would you deny any one in this state a glass of wine with his dinner, when accustomed to it? But it is a fact, that if he takes much, it, in the end, incapacitates him from struggling, and carrying out his plans with success. If he knew thoroughly how to stimulate and manage himself with water, he would be able to do everything with gaiety, tranquillity, confidence, and facility, and he would save enough every year to pay all his discounts, or to insure his life for a handsome sum. The drinking of wine and spirits is only a habit, like smoking and snuff-taking, only somewhat more expensive, and the disagreeable feeling when they are not to be had, is as great in the one as in the other.

The great temperance man, Priessnitz, drank one glass of champagne with me at a wedding; it is true we did not much like it. Champagne, though, is a very good wine, but can seldom be had good; the vile compound that replaces it on most occasions, even in the first houses and hotels, being composed of materials which are excessively injurious to the liver and the digestive organs, as many find out the day after drinking it. The *rascally* inventors and makers of falsified drinks and eatables deserve *not to be encouraged, but to be excommunicated*. If I had my will, I would inflict the severest punishment; I would make them take themselves what they so unfeelingly destine for others.

The horrible nature of this infliction may be imagined by the imaginative reader, by my relating to him the following story, which, though not very new, he may, *par hasard*, not have heard before. In the olden time,

long before the days of wholesale druggists ; before *bitter colocynth*, *gripping aloes*, and other *gentle drugs*, arrived at Albion's shores, filling our stately ships ; before castor oil was brought in fleets, and "poured along the town," there lived an ancient herbalist, lean, and of sallow hue. One day, in deepest trance, reflecting on his favourite herbs, without the power of conscious thought, he swallowed something ! Soon to his wits returning, with tears in fountain gushes, rolling down his cheeks, and sweat distilling from his agitated brows, and pouring down his pitiful nose, like waters meeting, he rushed from his little room. Entering the better lodging of a favoured son of Esculapius, "Doctor, oh ! doctor," he cried, "I have swallowed two of MY PATENT PILLS !" The doctor, cruel man ! *with too careless look*, replied, "Well, you have *done the deed* ; you are finished off !"

To get a motto which I had thought of, I sent for a volume of Byron, and although I imagined I had read all he had written, I found the following, which was new to me, and may be so to the reader. I make use of it as illustrative of my subject :—

#### FRAGMENT.

" *On the back of the Poet's MS.*

" I would to Heaven that I were so much clay,  
     As I am blood, bone, marrow, passion, feeling—  
 Because at least the past were pass'd away—  
 And for the future—(but I write this reeling,  
     Having got drunk exceedingly to-day,  
     So that I seem to stand upon the ceiling ;)  
 I say—the future is a serious matter—  
     And so—for God's sake—hock and soda-water !"



This cannot be reflected on without at once seeing a rock on which he split,—the enemy which often guided his pen and directed the current of his thoughts,—making him an easy prey to those who hated him or envied his powers, and giving him many a *head-ache*, *stomach-ache*, and *heart-ache*. He was always grumbling about his “clay,” and wishing himself out of it; had he had the luck or good sense to have “moistened his clay” with *water* instead of “*blue-ruin*,” he would have found the said “clay” a very plastic and agreeable companion in a long and delightful poetical life of eighty or a hundred years, instead of dying at a little past thirty, and being always unhappy. And, moreover, had this greatest of great poetical geniuses, Shakspeare excepted, that man has ever seen, known the rewards of temperance, with his naturally generous disposition he would have done incalculable good, in forwarding many of the vital interests of mankind; with *longer life*, all things were to have been hoped for from Byron, for he loved truth in his inmost heart. Unfortunately he got into the *wrong track*, and did not know how to get out of it; sometimes committing the intemperance of fasting for days on biscuits and soda-water, then eating lobsters to excess, and with other matters setting his brain on fire, and at last ending his days in the prime of life. Notwithstanding all this, I would give up my knowledge of human nature, if he was not the most persuadable of human beings.

Give me any full-grown individual, and let me act on

his system and his brain, through his stomach, with meats and drinks in *small* or *larger* quantity *at my disposal*, and I will make him grave or gay, cheerful or melancholy; reduce him to the depths of despair, or elevate him to a fancied heaven. I will destroy his memory, or make him imagine himself the most miserable man on earth—the most to be pitied—having in his possession everything to make him satisfied. I will make him run or walk, lie in bed without the power of movement—to blaspheme or pray, and, although the best of persons, LAY VIOLENT HANDS ON HIS OWN LIFE. Of these states there is every shade of intenseness, which people produce themselves, without my being called upon to experimentalize; such is the human constitution, and such are the facts which medical men see frequently illustrated.

It is evident that the human mind, in its present earthly state of existence, is so closely connected with the body, that whatever affects the one must also affect the other; thus we shall find mental anguish produce bodily suffering, and *vice versa*. Ignorant persons, who take a superficial view of things, may look upon this as the doctrine of materialism; but this is a most absurd mistake. The body acts upon the mind, and the mind upon the body, and religion accords with, and indeed teaches, this fact.

Water, temperance, cheerful spirits, and enough of *proper* enjoyments, (the natural result of the two former,) would give most men a term of existence from eighty to a hundred and ten years, ending

with a cheerful and “green old age;” and when the years could no longer add to their numbers, they would, in leaving their old companion, bid him a kind farewell, when taking his last long sleep in an arm-chair by the fire-side, in many cases surrounded by his children, and his children’s children’s children, to whom he had been a good example, a kind preceptor and protector. This lapse of years would, too, have given a man time *to do something without hurry or anxiety*; and it would be certainly much better than dying in a heated room, with closed blinds, a prey to pains and regrets, surrounded—not by his dear children and soothing reminiscences—but by hundreds of *vials*, (if there had been time to send so many,) which, as happens full often, had “poured out their wrath”—not the less for being disguised in balm and wrapped in coloured paper—on the devoted head of the suffering victim of a misspent life, mistaken indulgences, and medicinal treatment.

It is the fashion, in all the works I have seen on the “Water Cure,” to say that Priessnitz has no theory or principles of practice, that all he does is by a kind of instinct—by looking a man through, as I have already said. Were he told so, he would feel anything but complimented; he prides himself above all things in not doing anything without a reason and according to *his* theory and principles of practice. He looks at and feels the skin, examines the make of and marks on a man with the greatest attention and accuracy, and makes them valuable guides as to what he ought to do, and



what opinion to form as to the state of the constitution, and nature of the disease. He goes no further, for the best of all possible reasons, because he does not know or understand the means. He does not feel the pulse or look at the tongue, both valuable and almost indispensable when understood, *and joined with all other means*; had he done this, he would have acted somewhat differently in many cases which I have noted.

Preissnitz is an out and out humoral pathologist, as might be expected. The theory of the causes and nature of disease which existed when man first began to reason on these matters, and before physiological knowledge, pathology, and morbid anatomy, had been brought to the perfection which they have now attained, was, that the vitiated state of the blood and the humours gave *origin* to all diseases, and explained their diversity. This simple theory being the most tangible and easy to be understood, is the most likely to be adopted by the non-professional to explain and satisfy their minds searching after the hidden causes of disease. I should not lay so much stress on this, but that it has led to an infinity of mischief; for instance, Mr. Morrison's pills are taken and given with the stupid and vain hope of expelling humours. *In all this, effects are mistaken for causes.* It may be said, at least, that, whether Mr. M.'s pills expel the bad humours or not, they most certainly carry away the good humours *sooner or later*, producing melancholy as black as thunder-clouds, *a destroyed digestion, despondency, and despair.* Many whom I have seen on the Con-

continent, as well as while I was practising in London, after having taken a course of thousands of these *poisonous pills*, presented a most frightful picture. If they had gone through the portals of Dante's Inferno, on which it was written, "*You who take this course leave all hope behind you for ever,*" they could not have been greater objects of pity and commiseration. Most of the popular works on disease are filled with these humours, and most quack medicine vendors avail themselves of this same delusion to entrap their unfortunate victims.

To make use of a simile:—Suppose I was to take my watch to the maker, and tell him the humours had put it out of order—that one humour made it go too fast, another too slow, and a third had stopped it altogether; he might justly think, with such ideas of cause and effect, that I must myself be *humorous* or joking. He would most likely add, "Sir, you don't understand the machinery and moving powers of your time-keeper, or the causes of its ailments," and, knowing I was a medical man, he might explain it by the following superficial analogy:—Each wheel is an organ, having a separate office to perform, but requiring the united aid of all the other "wheels within wheels," to execute it. Several of these, attached somewhat more intimately, form apparatuses which separate the general movement into seconds, minutes, and hours. The winding up and the propelling power, the mainspring, are its *general stimuli*, the nicely-fitting cogs and pivots its *irritability*, its ticking and movements shew its *sensibility*, and keeping

time its *thought*. The sum of all these constitutes its *life*. It has one humour, and but one—a little oil—which most assuredly, when in too great or too small a quantity, too thick, or mixed with dust, clogs the wheels, and interferes with the movements; but this is trifling, compared with an injury done to one of its wheels, which makes it go *ill*, or the breaking of the mainspring, which stops or kills it.

By exciting too much any of the organs of the human body, they may be made so irritable and ill-tempered as to produce as much *bad humour* as we please; for instance, by rubbing, or by putting dust or snuff in the eye sufficiently often, the organ that produces *tears* will manufacture and throw this liquid out in large quantities, until it becomes “*scalding*,” or until the eye is inflamed, and full of purulent matter. The same state may be produced in the stomach, liver, kidneys, &c. The beautiful machinery of a watch cannot be understood in a day or two by some, but it is simplicity itself, compared to the *living human body*, whose diseased states no *humoral* pathology will explain, which requires years of study, and *something more than a mechanical mind, to understand*. But a gentlemen brimful of these humours, says he is not satisfied still but that bad humours are the cause, and not the result of morbid action, as shewn clearly by the different kinds of “*crisis*” that take place under the influence of the water cure. I don’t myself quite give up the humours, I only wish to keep them in proper bounds. You know there are ladies who are sometimes very low-



spirited, they know not why—sometimes (Heaven knows!) with sufficient cause—but whether real or imaginary, after a certain time they will begin to cry and sob most piteously, and go on in this way until they are quite exhausted. When the paroxysm is over, they are all sunshine, cheerfulness, and gaiety. This state of things has been so beautifully described by the poet, that I cannot resist presenting it to the reader:—

“ The heart is like the sky, a part of heaven,  
But changes night and day too, like the sky ;  
Now o’er it clouds and thunder must be driven,  
And darkness and destruction as on high :  
But when it hath been scorched, and pierced, and riven,  
Its storms expire in water-drops ; the eye  
Pours forth at last the heart’s blood turned to tears,  
Which makes the English climate of our years.”

Now, this is nothing more nor less than a veritable *crisis*. But he must be a very simple thinker on these matters, indeed, who imagines that these tears, or humours that have been thrown out in such large quantities, and which have afforded such relief, had been flying about the body, now visiting this place, now that, doing all sorts of mischief, and causing depression of spirits and despondency. Such, however, are the crude notions of the simple and pure believers in bad humours as the cause of diseased action. Again, some people, when they burn themselves, do all sorts of things to “ *draw out the fire* ;” now this is exactly the same idea, as the humorous one — *something to draw out*. They cannot form an idea of an increased, diminished, or

changed action in the part, without there being something in it that “ must be drawn out.” Now, in a case of burn, if flour is placed on the part, it takes away the pain and burning feeling directly, and produces a sensation of cold. This change in feeling is produced, not by extracting fire, but by the protection which it affords to the exposed and injured nerves. If it should still be fancied that “ the fire *has* been drawn out,” rub off the flour, and it will again begin to *burn* and smart.

Priessnitz recommends people to clothe lightly, and to avoid flannel next the skin; there is, no doubt, some reason in this, but, as in some other matters, he goes to extremes. His prejudice against flannel is so great, that he will not allow its use under any circumstances. He wears himself in winter, next the skin, a waistcoat and drawers of wash leather, or doe skin, and the drawers, I believe, even during summer. When I saw these, I must confess I was surprised. I have no doubt this is as bad, and even worse, than flannel. This leather casement was once the fashion in England, and recommended by medical men, but it soon fell into comparative disuse. It is bad, by completely protecting the surface from the bracing action of the air, and not producing warmth in proportion; when it becomes damp by perspiration, or other causes, it remains so for a long time, and is difficult to dry. Flannel, on the other hand, being porous and light, gives sufficient warmth, and even when wetted, becomes quickly dry, preventing the effects of sudden changes from hot to cold, and allowing the atmosphere

to act more fully on the skin. After wearing flannel for thirty years, I left it off in three days after commencing the "water cure," and have not worn it since; but *under ordinary circumstances* it should be done with great care. If warmth is wanted, in many cases it is better to wear flannel outside the shirt, for there is no doubt it irritates the skin more or less. Wearing it at night is, under *any circumstances*, pernicious; in bed it is not wanted, for there are no variations of temperature. Flannel is most useful to those who sweat much, either from heat of climate or from the nature of their occupation, for what is lost in one way is gained in another—the prevention of sudden chills. It is highly useful for the rheumatic and gouty, and should *be worn by many till they are long advanced in their cure by water*. In ordinary cases, where the skin and the constitution are kept in vigour by water, it is superfluous, and even injurious. What makes Priessnitz so obstinate on this point, I cannot exactly determine, but he has, with all his genius and sagacity, two or three decided mystifications. He evidently tries to stick as close to nature as he can, and by this he has done wonders. I have thought that perhaps he had a notion that because doeskin was a good covering for an animal that was always exposed to the weather, it must be the best for man; but he knows that a living skin, and the same after it has passed through the hands of the tanner, are very different things, and notwithstanding his violent objection to flannel, that another kind of animal, the



sheep, is kept warm by it, and that it seems to answer very well.

THE MACKINTOSH CLOTH MADE INTO COATS, IS THE WORST THING THAT COULD HAVE BEEN CONTRIVED ; it is like putting a man in a bottle with only his head out. The insensible perspiration cannot pass off, and it condenses on the skin, making all the clothes underneath quite damp. After wearing this kind of coat for a few hours, when it is taken off, the individual *feels cold* and *very chilly*, and becomes very liable to rheumatism and bowel complaints. I had a great coat made in the following way :—the skirts, from the waist to the ancles, are made of blue Mackintosh cloth, the body and sleeves of ordinary cloth to match in colour, a movable cape, the same as the skirts, attached with buttons under the collar. With this I am impenetrable, and when traveling in fine weather, or at night, the cape can be removed, and I thus escape a general steam-bath, and have all the advantages of the excellent invention of Mackintosh.

There is no doubt that man was intended by nature to expose more of his person to the weather than he now does. When a gentleman asked a North American Indian, who was scarcely decently dressed, whether he did not feel cold, he put his hand very gently on the questioner's face, and asked him if *that* was cold ; on receiving a reply in the negative, he said, " Well, then, I am all face." Look at the décolleté state of the gentler and weaker parts of the creation in a ball room, and ask them if they are cold, or if they do not suffer from their

habitually bare necks, they answer, no. On the other hand, we see men for their sins tightened about the neck with bandages, which nearly prevent all movement and almost produce strangulation, making them look as if they had swallowed a metallic rod and could not digest it, unable to look to the right or the left, resigned to their fate, and apparently stuck up for life. Most of the peasants about Graefenberg go about with bare legs and feet; I had the curiosity to ask them if they did not suffer from cold feet. "Only in very frosty weather, never when it rains," (and it is nearly always raining,) was the reply. An Irish gentleman at Graefenberg told me that his shepherds were never so well as when their feet were constantly wet by being in the low grounds. There are but few days in England when a foot-bath might not be taken in this way. Seriously, encasing the hands and feet in leather is no doubt pernicious to the health in the long run, though not admitting of much reform in the present state of civilization, without, indeed, some physiological Brummel were to set the example of going bare-footed, and exposing the hands to the breath of heaven.

I shall now say something about the advantages of a "Water Cure" Establishment as briefly as possible. Amongst the foremost are the removal of the patient from all *business, care,* and TEMPTATION, that can interfere with the cure and his return to a healthy state. The patient goes to bed early, and gets up early, and goes through the different parts of the cure with more ease

and pleasure from the stimulus of *association and example*; he has the advantage of seeing similar cases to his own cured, of comparing notes and receiving consolation; “the tocsin of the soul—the dinner-bell,” is here real music, and the dinner, though simple, a positive enjoyment; there is no gêne, every one does as he likes, making acquaintances or not, but with the buoyant spirits that are always reigning, becoming sooner or later infected, and joining in sociability and mirth. It is a general remark that the most reserved people, on their arrival at Graefenberg, become in a short time much changed, from reserve and ill-temper to the reverse.\* During the cure, *the mind must be left as unemployed as possible*. We know that great exertion of mind will arrest the operation of powerful medicines; I found that by exerting myself in taking notes I retarded my cure, but in such a scene of interest it was impossible to resist. *A certain degree of*

\* “Laughter,” says Professor Hufeland, of Berlin, in his work on longevity, “is one of the greatest helps to digestion with which I am acquainted, and the custom prevalent among our forefathers of exciting it at table by jesters and buffoons was founded on true medical principles; in a word, endeavour to have cheerful and merry companions at your meals; what nourishment one receives amidst mirth and jollity will certainly produce good and light blood.” But we no longer want professed jesters and buffoons, water produces “mirth and jollity,” an easy mind, an easy digestion, and “good and light blood.” What more could be had from stimulants of all kinds? Unfortunately, in the majority of cases stimulants produce the very reverse, thickening the blood, making the temper uncertain, often gloomy and morose. The present mode of producing hilarity by fictitious champagne and other falsified wines, and other similarly violent means of unloosening moral and physical tightening, the depression caused by ill health or the *stimulants of yesterday*,



*cold* is essential to the cure of some diseases, but the winter at Graefenberg is rather too severe for a certain class; I should say that the climate of England was the best possible for the "water cure;" in fact, it is, taking it altogether, the most healthy climate in the world, and I have had a fair opportunity of judging. Fortunately for my countrymen, there is none where *stimulating* and *drugging* can be carried on with so much impunity; but, notwithstanding the salubrity of the climate, the skin is kept in so sensitive a state to the variations of temperature, by stimulating the internal surface too much, as to produce rheumatism, colds, and diseases of the chest, &c. Stage-coachmen have found out this secret; they now drink very little, comparatively, and always refuse hot brandy and water and *hot beer*, because they *now know* it makes them *feel the cold*, and makes them liable to rheumatism, more quickly even than the same things

are very poor substitutes for the exuberant animal spirits produced by temperance and water. There is another little point which I had almost omitted, which is, that if wines were dispensed with, there would be more dining together and sociability amongst the middle classes; and among the richer orders the Dr and Cr accounts of dinners would not be worth keeping, all would be put on the *free list*. Many people spend more than they ought, and necessarily make themselves unhappy; they think themselves *obliged to give dinners* and *make their friends ill*. I once said to a lady, apropos to dinners, "You seem to me to give yourself an immensity of trouble." "Oh!" she replied, "the trouble's nothing, *the expense is all*; we are not very rich, and one of our dinners would keep our large family in all the necessaries of life for a month." I have remarked one thing—however hospitable the host may be, the guest who *does not* drink wine is not the first to be omitted in the invitations!

taken cold. The Russian gentlemen are, of all other nations, the most sensitive to atmospheric impressions; with a breath of air on go the military cloaks, while the Italians, in the same place, are going about in summer jackets. When I first observed this at Graefenberg, I was curious to know the reason of the anomaly; it was soon evident. The Russian gentlemen having the surface always protected with furs, so that the air cannot act at all on the skin, living as much as they can in rooms highly heated by stoves, drinking hot tea with brandy in it at all hours of the day, (it is the fashion to have it simmering on a side table from morning till night, with a bottle of brandy near at hand, for all comers;) whereas the Italians live in the open air, and take very little stimulating drinks—this, I should think, speaks for itself. There is another point, which I ought not to omit—the length of time that the cure takes in some cases. I can illustrate this by the following recollection:—A Russian general, much past fifty, who had been for many years right-hand man to Constantine, brother to the present emperor, and who had worked him to the injury of his health, had been twelve months at Graefenberg, and although wonderfully improved, and on the high road to the perfect re-establishment of his health, often came to me to grumble at the length of time he had been there, and to seek consolation, which I administered in the following strain:—“ You told me, twelve months ago, that you were a dying man, not expecting to be in the land of the living for another year;

you said some of the first medical men in Europe had had the candour to tell you that not much could be done for your case. You have *now* every rational prospect of living twenty or thirty years longer, and with more enjoyment and freedom from pain than you have experienced for thirty years, for you know you have got upon a good plan, and intend to stick to it; you have said, moreover, that for nearly the whole time you have been here, you have *enjoyed* eating and drinking, sleeping and exercise, more than you ever did before. Now, I cannot but say there is a little perverseness and unreasonableness to grumble about a few months more or less." It always ended with a cheer up and an acknowledgment that I was right; but it did not prevent him returning every three or four days to hear the same remarks repeated. There are also some curious phenomena frequently occurring at water cure establishments, which ought not to be omitted, amongst the encouragements which a patient finds there, and which cannot fail to inspire him with a thorough conviction that *there is nothing like water*. Some of these came under my own observation, and as they are really as curious for the medical reader as they are wonderful for the non-professional, I will relate one or two.

Colonel K——, the Commandant of Military Police at Milan, a fine old man, much beloved by all who have the pleasure of his acquaintance, came to Graefenberg soon after my arrival there. He was carried up into his room in the arms of his servants; he had not been



able to walk for a long time. It was not a case of paralysis; he could move his legs and had feeling in them, but could not walk. (His case I shall give in its proper place.) His treatment of course went on in his room, which looked out upon the court in front of the large house. About two months after he had been treated with water, one day, before dinner, his window was thrown open, and a man was seen shouting and dancing, as if he were crazy, calling upon some people he knew in the yard, myself among the number, to come up to him. We made a rush for it, helter skelter, who should get first, not knowing what could possibly be the matter. When we entered the room, judge the astonishment of all, to find that the Colonel had recovered the use of his legs; he went on dancing, jumping, and embracing his friends. Priessnitz was sent for: when he came, though he could not help smiling at the singular scene that presented itself, he said, "I am sorry this will not last; it is only the '*bad stuff*,' which is gone somewhere else." We all looked a little chop-fallen at this. In the evening the legs began gradually to get stiff again; but not so bad as they were before. He was soon after able to walk with two sticks and to mount to his room with the aid of the arm of his servant. Before I left he walked much better; his appetite, which had been deficient for many years, was returning with vigour, and he had the fairest prospect of ultimate recovery.

*Case of Sudden Return of Hearing.*

I shall give another illustration equally curious. Baron V——, Colonel in the Austrian Service, whose whole family had experienced the benefits of water, was at Graefenberg with his wife and daughter. His daughter had been given up by the whole faculty of Brussels, Paris, Berlin, and Vienna; his wife, with all this travelling and anxiety, some weeks after she had been at Graefenberg, and when her mind had become more easy, fell into a state of typhus fever of the very worst description. (This is often the case when the stimulus of anxiety is suddenly taken off.) Priessnitz saw it coming on, and wished her to do something to prevent it, but she would not listen to him, saying, “I am here for my daughter, never mind me.” She recovered of the fever, however, by the water treatment, and continued the cure for her general health. The daughter was one of the young ladies who received the affectionate “Farewell—farewell for ever!” before going to the “water cure.” By the time I am speaking of, she was fat and ruddy. To return to the Baron. Nearly forty years ago he had been wounded in the back of the head, in defending a bridge against the French—a gallant action, which is commemorated in an engraving which he shewed me. From that time he had been nearly deaf. He was very fond of bird-catching, at which he was a first-rate hand; and as I never heard of his mode in England, and it may be considered

curious by some of my readers, I will describe it. After placing the twigs, he hid himself near the place, and made a loud noise resembling that which is made by the owl when it is caught. The poor little birds, fancying their midnight-enemy in trouble, or in a trap, flocked in hundreds, not to assist him, but to peck his life out. In this way he would sometimes entrap a hundred birds "at a sitting," selecting those he wished to keep, and letting the others off. One day when thus employed, suddenly he heard the noise of all the birds, sufficient to split his head. Off he ran, and when he got to his room, his servant seeing him in such a hurry, thought he wanted a bath, and cried out in the usual way to the deaf man, so that he was obliged to put his fingers in his ears. This went gradually off, until he was nearly as deaf as ever. On another occasion his hearing returned at dinner; he bolted out of the room as if he was running for his life. He said afterwards, that the clatter of 300 pairs of knives and forks introduced so suddenly to his attention, was more overpowering than a park of artillery let off at once, and without notice.

Before I leave these general observations, I shall add a few remarks on diet, and the action of water, concluding with a hint to any of my professional friends who may be tempted to visit Graefenberg. Much as I admire Priessnitz, impressed as I am with the vast good he has been instrumental in producing, both in his own practice, and by his example to others, it shall not in any way prevent my displaying any errors he may have



fallen into, to the best of my judgment. It may be said, that a looker-on at a game has an advantage over the player, and sees points which are overlooked from too great intentness, although the player may be more proficient than the observer. I have already hinted at Priessnitz' obstinacy about the diet, and it is besides but natural to suppose, from the immense number of patients he has to attend, combined with his extreme reserve, slight mistakes may occur in a few cases. The greatest errors in the treatment, according to my view of the case, exclusive of the diet, have arisen from his too confined notion of the NATURE and EXTENT of morbid changes. But this is shewn more particularly in the treatment of chronic diseases, where his attention is directed to the expelling of "bad stuff."

Notwithstanding the stress I have laid on rational moderation in diet, and shall lay on air, exercise, &c., as adjuncts to the "water cure," still let it be understood they are not the essentials. The most *striking effects* I have seen from the action of water were in *bed-ridden patients*, and others who could not leave their rooms, and others who had not been on their legs for ten and sixteen years. Water has *an action of its own*, and as peculiarly its own, as that of mercury, quinine, or any other drug. The grand distinction of the "water cure" from all others is, that the whole constitution is repaired, and all diseased states, however complicated, *radically* removed. As long as anything remains wrong, water will *not cease* to produce evident effects; when all is in

a healthy state, and working in harmony, no very evident effect can be perceived or produced.

Count Mazenski, an intimate friend of mine, whose little daughter was cured of hydrocephalus, or water on the brain, when in an advanced state, (I mention the name, as most of one's water friends are too glad to have these matters well authenticated, to care about their names appearing in print; the present one I can answer for—at the same time it facilitates the enquiries of medical friends going to Graefenberg,) introduced me to a near relation—a lady very nearly seventy years old. She came under the care of Priessnitz in the following state: she was completely crippled with rheumatic gout; had not been out of bed for nearly twenty years; for sixteen years had been supported in nearly an erect sitting posture, with pillows, being unable to lie on the back, or on either side. For seventeen years she had not been able to hold a pen. Priessnitz at first refused to undertake her case, or to submit her to the influences of water. But from an extraordinary tale which she told, and the entreaties of her friends, he consented to try some gentle means, which were nearly as follows:—Every morning the upper part of her person was gently rubbed all over for a few minutes with a towel moistened in cold water. She was then well dried, and the dress replaced. The legs and feet were then well rubbed in the same way, and the same thing was repeated in the evening. A bandage, well wrung out, of cold water, was placed round the waist,

covered with a thick dry one, and the same dressing occasionally to the legs; a few tumblers of water were drunk during the day, more or less, as she felt inclined. In a few weeks a slight pain was perceptible in the back, and by-and-bye a boil made its appearance, which, in due time, discharged a quantity of matter so offensive, that only one person could be induced to enter or remain in the room—a strong Polish servant girl, about twenty years old. The third day after this, the poor girl had the jaundice. In the course of a fortnight the old lady was able to eat almost anything, after years of abstinence and care. She could lie and turn about as she pleased; and I saw her a short time afterwards writing letters, which she did half-a-dozen a day, to send to her kindred and friends as the greatest curiosities, and to convince them by ocular demonstration of what they otherwise would not have believed. Here there was not “air and exercise,” and no particular diet. No doubt it will stagger a little those who think that *diet, air, and exercise* constitute the principal parts of the water cure. I have said they are necessary and valuable adjuncts to the cure of diseases by water, and will restore health *alone* in a variety of cases; in a variety of others they will not. I could give a number of illustrations even more extraordinary than this, to shew that *water has a mode of action of its own*; and I may as well mention here as anywhere else, A CAUTION to those who may be labouring under *long-standing chronic disease*. If they apply water themselves as laid down in books on this mode of treatment,



they may get themselves into a dilemma not without danger; a "crisis," as it is called, which, though made of trifling importance by due administration of the "cure," may, if not understood by themselves, or those about them, prove dangerous, and even fatal, as has unfortunately been more than once the case. The *crisis* may take place in any case, but no human knowledge can predict, with certainty, of what kind it will be. It is well, therefore, to ask beforehand, how am I to increase or diminish this crisis, and which will be best? What shall I do if I have a "sweating crisis," which comes on every night in the most profuse way, and which I cannot stop or mitigate? or if I have a slow "nervous fever crisis," which prevents sleep, and will not leave me night nor day? or if a "urine crisis" comes on, with immense deposits of various kinds of matter? or suppose the skin takes up the action, and throws out matters of different kinds, which would puzzle a first-rate pathologist, or a skin doctor, &c. &c.? It would be well to ask these questions before you begin, while labouring under a long-standing *chronic* disease; to treat yourselves with "simple water," which, as you say, "you sometimes drink, and wash your face and hands in." "*Simple water*" will cure diseases beyond the reach of any other matter or element, or any combination of matters or elements. And Priessnitz—the genius! the immortal Priessnitz!—against all odds, and his own want of elementary knowledge, has proved it over and over again.

It must not be forgotten, that water, *used as a remedy*, must not be abused. I am sorry to say this is too much the case with many, who fancy that quantity is everything needful. I have seen much harm done even by too much drinking, more especially at meal time, when a very moderate quantity is sufficient.

I think I hear you say, “*I am quite disappointed ; I expected that I was to be able to cure myself of every ailment, acute or chronic, fever or inflammation, recent complaints, or those of long standing.*” I am grieved in being obliged to disappoint you, but the truth is, it cannot be done alone by the patient, for it is twenty to one but that you would commit an error at the first step. I now hear you say, “What then can I do, and how far may I venture?” You can apply cold water every morning, either by the wet sheet-bath, cold bath, or shower-bath, or simple ablution ; take a quiet walk, and drink three, four, or five tumblers of water before breakfast ; take a foot-bath at eleven or twelve o’clock, a tumbler or two of water, and a good long walk. The fomentation may be applied during the day to the stomach, as described. For a cold, you can lie in the wet sheet, and be afterwards well rubbed in the shallow chilled bath for five minutes, or, when heavy and indisposed, a good sweating, and a bath ; but not much more would I recommend to ordinary people to try themselves. This you can do, as you would take “two pills over night, and a draught in the morning.” If I am not very much mistaken, you will soon have plenty of clever, intelligent medical men

to put you in the way of treating yourselves. I have said before, that I was sorry to find in different parts of the continent so many practising this method, who really knew little or nothing about it, bringing it into unmerited disrepute. It is easy enough to order a patient to sweat and take a cold bath, a hip-bath, and a douche, every day. But is this the treatment adapted to the case? or, supposing it to be so, how long should it be continued before a change is made? I went, accompanied by a friend, to an institution, beautifully situated and fitted up, on my way to Graefenberg; I knew little about the merits of the treatment then, except from books, so that I did what I was told very naturally; I only remained a fortnight, but I now know that, if I had remained there, and gone on in the plan I was put upon, I should have received considerable injury. This I discovered on my arrival at Graefenberg, for Priessnitz pointed out the mistake at once, which, in the course of a few weeks, I was able to understand from observation and inquiry. The master of the establishment in question had been at Graefenberg six years previously, *for a fortnight*; he returned, and did what he had imperfectly seen done, with little regard to age, sex, constitution, or disease. Since that time, Priessnitz has *progressed, and greatly improved* his general practice, the former gentleman had *stood still*; FROM THE SIMPLE FACT, THAT NATURE HAD NOT INTENDED HIM FOR A MEDICAL MAN. Regularly educated practitioners have, very naturally, great prejudice *at first* against so great



an innovation as this on their accustomed modes of thinking ; and, besides, a great many have a good practice, which they do not like to give up or change. A comfortable medical practice is a very pleasant, easy-going business, which may be readily described ; a compliment or two—a promise, and a prescription—and last, but not least, a guinea. This is the reason why there are, as yet, so few engaged in the water cure, who could advance, and do it justice, and why it has fallen, in some instances, into the hands of impostors and unqualified persons. One of the oldest and most eminent physicians on the continent said to me, “I wish I was a young man again, if it was only to cultivate and advance this admirable system of Priessnitz. It will not engage us as it ought to do, until England takes it up, and then we shall receive it back from you, and take it with another feeling.”

It is next to impossible to do more than lay down general rules in the treatment of any given complaint. The treatment must be changed from day to day, according to the state of the patient, the nature of his disease, and the powers of his constitution. One day using cold water, sweating, and douche ; at another time substituting the wet sheet, chilled, or tepid water, and even sometimes *warm or hot water*, which Preissnitz has recourse to in rare cases, at other times *doing nothing or next to it*. In fact, it resolves itself to this : all depends upon the knowledge and tact of the practitioner ; and it requires the same study and same knowledge of all diseased

states, the powers, properties, and combinations of the remedy, as in the practice of medicine. Without this a few may have *their nervous systems impaired, the skin put out of order*, instead of into a healthy state, and, by many stupidities *I have seen practised*, find themselves *disappointed in their "cure."*

*Case of Hypochondriasis.*

The following case will be interesting, as an illustration of the remarks I have been making. This gentleman arrived at Graefenberg a few weeks after myself, and his case particularly attracted my attention. He told me he was a military paymaster, and that for some slight ailments, he had taken some thousands of Morrison's pills. (It is astonishing how these pills are taken on the Continent; and I may observe, that people whose nerves are very strong, and who have PECULIARLY INSENSIBLE INSIDES, can take them for some time, without the *worst symptoms* they produce becoming evident; but these fortunate individuals are rare.) He became gradually worse and worse, till the tone of his stomach and bowels was nearly destroyed; no action could be obtained in the latter, except by the most powerful means. He had entirely lost his appetite, and was afraid of eating, from the pain and uneasiness it caused for hours afterwards. Added to this, the most violent palpitation of the heart came on, with distressing lowness of spirits, which was at times so overpowering, that it required all his fortitude to prevent him from committing suicide.

One day he came to my room, and I examined him; the lungs and heart were perfectly sound. On pressing deeply on different parts of the stomach and bowels, great pain was caused, particularly about the region and pyloric orifice of the stomach; in the latter there appeared to be some hardness. I found that this process of pressing, though made with great gentleness, made his hands and feet *quite cold*; the case was a clear one. He was ordered to go through the sweating process twice a day, a hip-bath, and douche, *to eat as much as he could, and without distinction*. At the end of seven months of this active treatment, he left Graefenberg very little better. The error in this treatment was the douche, sweating, and diet, for which he was as unfit as myself. The misapplication arose from Priessnitz' theory of disease, which was that there were drugs and morbid "stuff" to be got out of the system, on which depended his ailments. *Though not so wrong in the supposition in many cases*, in the one in question he was in error. His treatment should have been, according to his own shewing in my case, the general fomentation by the "wet sheet," an additional hip-bath, and the warm compress to the bowels, foot-bath, &c. Another fatal error was in the diet; for he stuffed enormously the most indigestible matters, in the hope of gaining strength. After a dinner of pork and "sauer kraut," salted cucumbers, and pastry for a ploughman, I always, the next morning, *made a point* of conversing with him. I generally found him sitting on a bench by himself, looking on the ground,



and avoiding all intercourse. To the greeting of "Well! how are you to-day?" I at first only got a grunt, and then followed, "You are always asking me how I am; of what interest can it be to you? It is too bad; a man can find no rest in this place." With a little coaxing, however, he generally came round, and then he would relate his sufferings. "Oh, I have passed a horrible night! No sleep, and I was dreadfully sick; such sour, bitter stuff," &c. If I had said a word about the pork, sauer kraut, and other indigestible combustibles, he would never have spoken to me again. Thus this unfortunate man went on from day to day, if not aggravating his ills, at all events keeping them stationary. With a rational system of diet, and a more appropriate treatment, I have no doubt he might have been much relieved, *though not cured, for the organs ESSENTIAL to well-being were too much injured by the IMMENSE QUANTITY OF VEGETABLE POISON which had been applied to them.* I could relate a number of similar cases, ending more or less in the same way. I may here mention that I made it a rule to inquire the morning after one of the indigestible dinners, how the dyspeptics and hypochondriacs found themselves. They were invariably in a suffering state. By some I was at last detected, and they would give me no answer but "Ah! I suppose you think I ate too much yesterday. I won't tell you how I am." In such cases I replied, "I don't want you to tell me; I can see how you are, by your moroseness, and the absence of your usual amiability. We will have a chat to-morrow—i. e.,

if you don't stuff again to-day." I had committed myself on first going to Graefenberg, by giving some friendly advice as to gourmandizing. On this being repeated to Priessnitz, (for he is told everything that is said and done,) he said, "Eat as much as you like." This was told me again with exultation, and a look as much as to say that I knew nothing about it. I mention this as a hint to any of my brethren who may go to Graefenberg. Their maxim should be, "hear, see, and say nothing," otherwise their journey will be in a great measure in vain, for nothing can exceed the prejudice against medical men. On the other hand, with discretion, they will learn and see what they will never forget, and add another to the disciples of the "water-cure." As I am on the subject of hints, I will give another illustration. When I had been some time at Graefenberg, and had become tolerably *au fait*, popular with the patients, and spoken well of by Priessnitz, as the only person who had *seemed* to understand *his cure*, (*incredible dictu!*) a Polish physician was presented to me by a nobleman of his country, requesting me to assist him in his inquiries. Shortly after this, I was attending a highly interesting case of fever, the progress of which he also wished to study. I made the request to the patient, when the wife cried out, "What! that stupid doctor who laughed at the water-cure, and told Miss —— she would get cured sooner at Berlin than at Graefenberg? Oh, no! I'll take care he does not enter here. Besides, it's no use; *he* will never learn 'the cure.'"

Priessnitz says very few of them can." This gentleman having committed himself, and, from further want of tact, finding the *entrée* barred to him, left Graefenberg violently opposed to the "water-cure." No one, I think, need hope that Priessnitz will lend them a helping hand in prosecuting their inquiries, though nothing could be done more easily. He has given the *profession* up for a bad job. This, in truth, is not to be wondered at, for they have annoyed and persecuted him in every way they possibly could. He now can hardly believe in their sincerity, even when most sincere. He says, "when they leave this, they are sure to go back to the drugs." This must be said, as long as the student prosecutes his inquiries without attempting to dissuade the patients from continuing the cure, or persuading them to take medicines; he will throw no direct obstacles in his way. After preventing at least twenty persons from leaving Graefenberg before they ought, (which he knew of;) after for eight months following him like his shadow, to prince or peasants; after taking 500 cold-baths, 400 sit-baths; after reposing 480 hours in a wet sheet, drinking about 3500 tumblers of cold water, &c., he could only say that *I seemed* to understand *his cure* better than any one he had yet observed, and that by possibility *I might be sincere*. He never gave me the slightest assistance, though solicited by some of his most sincere and intimate friends. As it is, I owe him much, as I owe for all good I may receive, however it may come; but had he assisted me, it would have saved me an in-



finitude of trouble, and made me *his* debtor of debtors. But truth requires me to say, that he never has been too desirous that his system should be understood, or that works should be written on the subject. I speak on the authority of his longest and most intimate friends. When I returned to my friends, I was so robust and changed, that they were surprised; but by a variety of circumstances, which I need not detail, though I am in good health and spirits, I have not my Graefenberg looks, but I have the secret of putting myself in condition in two or three weeks, if I had the time; and what I have done since in travelling, &c., which has pulled me down, was far beyond my reach before I thoroughly knew the powers and properties of water. In fine, what I would recommend to my medical friends at, or going to, Graefenberg, is in the spirit of the pathetic appeal of the tapster, when he found himself under the hands of the dentist—and it is equally applicable to all knowledge we might wish to acquire or to *extract*—“*Draw it mild.*”



W A T E R.



Heil! Heill! auf's neue!  
Wie ich mich blühend freue  
Vom Schönen, Wahren durchdrungen — — —  
Alles ist aus dem Wasser entsprungen!!  
Alles wird durch das Wasser erhalten!  
Ocean gönn uns dein ewiges Walten.  
Wenn du nicht Wolken sendetest,  
Nicht reiche Bäche spendetest,  
Hin und her nicht Flüsse wendetest  
Die Ströme nicht vollendetest,  
Was wären Gebirgen, was Ebenen und Welt?  
Du bist's der das frischeste Leben erhält —  
Du bist's dem das frischeste Leben entquellt!—

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Joy! joy! and delight!  
The sunbeams of gladness bright  
Wake all my being to mirth.  
All things have issued from WATER on earth!!  
All things by WATER are guarded below!  
Ocean, thy aid and thy favour bestow.  
Sprang there no clouds from thee,  
Flowed not brooks merrily,  
Leapt not in mirthful glee  
Streams from the azure sea,  
Earth were one focus of tempest and strife;  
Thou with the force of creation art rife—  
Thou art the being, the essence of life!

GOETHE'S FAUST, Second Part.

## W A T E R.

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THERE are very few, comparatively, who have any idea of the extent of the salubrious effects of water taken internally, or applied in different ways externally. In the former this arises from the custom of taking hot tea, coffee, wine, and spirits, &c., from an early age. The long indulgence in these fictitious habits produces an unhealthy state of feeling, attended with the fear that cold water would produce unpleasant sensations, and some injury to the stomach; there is, therefore, a barrier to its use, made up of fear, dislike, prejudice, and *custom*. But when this formidable barrier can be leaped over, or broken down, by a little reasoning and reflection, after a few essays the individual finds, and is convinced that he has been deprived of, a great source of pleasure, and of one of the most powerful conduces to health. By the great change in the feelings, the greater aptitude for mental and bodily exertion, the marked accession of cheerfulness and gaiety, from taking water, all these changes in a short time make a convert. The relish for food, and the quantity that can be taken,

and easily digested, the light and refreshing sleep without disturbing dreams—these, with the former, make him an advocate. The improved skin and complexion, conferring the freshness of youth, the clear eyes, the sweet and wholesome breath—all these, united to the foregoing, produce a zealous disciple, wishing others to share his benefits. By drinking abundantly of cold water, the whole apparatus of digestion, from the teeth to the liver, is improved, and resists decay.

A very interesting and valuable case occurred to Dr. Beaumont, an American physician. A young Canadian, eighteen years of age, was accidentally shot; the muzzle of the gun being about a yard from the left side, the charge of duck shot entered in an oblique direction, forward and inward, literally blowing off the integuments and muscles to the size of a man's hand, fracturing and carrying away half of the sixth rib, &c., and perforated the stomach. Being in perfect health at the time of the accident, and judiciously treated, he got well, but with an opening in the stomach large enough to admit the whole length of the middle finger into the cavity. Dr. Beaumont kept him above two years, at considerable expense, to make experiments, and to *see* how digestion was performed, and what changes took place in the stomach, under different circumstances. The details are, of course, long; they can be found in Dr. Andrew Combe's excellent work on the physiology of digestion, or Dr. Beaumont's work. Dr. Combe, discussing Dr. Beaumont's experiments, says, "The gastric



secretion, and the appearance of the villous coat of the stomach, undergo great modifications during disease, and on this subject also Dr. Beaumont's observations are highly valuable ; because, instead of merely inferring, as others are obliged to do, he enjoyed the privilege of *seeing* with his eyes what was actually going on. In the course of his attendance on St. Martin, he found that, whenever a *feverish* state was induced, whether from obstructed perspiration, from undue excitement *by stimulating liquors*, from *overloading* the stomach, or from fear, ANGER, or other mental emotion, depressing or disturbing the nervous system, *the villous coat became sometimes red and dry, and at other times pale and moist, and lost altogether its smooth and healthy appearance.* As a necessary consequence, the usual secretions became vitiated, impaired, or entirely suppressed ; and the follicles from which, in health, the mucus which protects the tender surface of the villous coat is poured out, became flat and flaccid, and no longer yielded their usual bland secretion. The nervous and vascular papillæ, thus deprived of their defensive shield, were then subjected to undue irritation. When these diseased appearances were considerable, the system sympathized, and dryness of the mouth, thirst, quickened pulse, and other symptoms, shewed themselves ; *and no gastric juice could be procured or extracted, even on the application of the usual stimulus of food.*" This is the internal state in which people often feel low in spirits, &c., inclined to take brandy and other stimulants, and in which all

kinds of drugs and incongruous mixtures are given. How different are the soothing and restorative effects of water in such a state ?

What can exceed the beauty, freshness, and purity of a glass of water taken from the spring? It leaves no mawkish taste behind it, no fictitious or unpleasant odour. When it is taken before breakfast, after a bath or general ablution, it cleanses all the passages, purifying the mouth, and filling it with sweet and pleasant fluids, making the individual cheerful, hungry, and wide awake. What a contrast this is to creeping downstairs with the eyes half-closed, huddling up to the fire, and swallowing scalding tea, eating a few bits of toast, without appetite, and requiring some relish to make them go down.

This drinking cold water in the morning, dilutes the viscid secretions, such as bile, slimy matters, &c., that have collected during the night, and makes them pass off. The determination being already to the skin by the wet sheet, or sweating, and the bath, or by simple washing all over, the cold fluid being then taken into the stomach, at first lowers its temperature, and that of all the organs contained in the abdomen, helping still more to lessen any irritation and heat, or undue collection of blood in these parts. The water is *rapidly absorbed* by the stomach, not *digested* as many suppose, and not a drop escapes into the alimentary canal. When it is all sucked up by the stomach, it goes into the general current of the circulation ; mixing with the

blood, it is first carried into the lungs, and then sent on by another set of tubes, *the arteries*, to the tips of the fingers and the points of the toes; and every intermediate part feels its benefits, giving new life and activity to everything it has come in contact with. It is then in great part thrown off, (mixed with waste matters,) by the skin, in invisible steam; by the kidneys, and by the breath. When a glass of water is swallowed, the stomach, by its motions, diffuses it over all its surface before it absorbs or takes it up, just as you would wash the face—and it has the same refreshing and beautifying effects, leaving it at a more natural temperature, and giving it a more healthy colour.

It appears almost incredible with what rapidity cold water is taken up by the stomach. I once, by way of experiment, swallowed thirty tumblers of water from the spring before breakfast—each a large half-pint—two of which I sometimes took at once. I was nearly three hours about it. At nine o'clock I was so hungry that I could hold out no longer, otherwise I would have tried another dozen. When I went out at six, I had a wet bandage on the stomach *tightly* applied, and covered by a thick dry one. When I went to breakfast, the abdomen was diminished in size, for my bandage no longer stuck so close. I never enjoyed a morning's walking more, and during the day felt perfectly well. My usual quantity was from five to ten tumblers before breakfast, two before dinner, one or two at dinner, and



two or three during the evening. This is about the general rule, that ought not to be exceeded *during the cure*. At first, when the stomach is much out of order, and the patient has not been accustomed to drink water, it is well to begin as GRADUALLY as he pleases. He soon gets to like it, not from thirst as is supposed, but from its refreshing effects, just as people take wine or spirits without being thirsty, *to relieve a low feeling, or produce a tipsy one*. Often when sitting down to my bread and butter, milk and strawberries, with an appetite that would have made dry bread delicious, I could not help comparing my state to that I could vividly recall, after taking two pills over night, and a white—no, a *black* draught in the morning. What a contrast in every sense of the word—in the moral as well as the physical man—one as unwholesome, irritating, and depressing, as the other was *cleanly* refreshing and exhilarating.

It is necessary to observe, that most persons who are delicate or ailing, by getting up before their usual time, and walking before breakfast, produce lassitude, headache, and other disagreeables for the rest of the day; this state never takes place if part of what I have described is done beforehand, and followed by a few tumblers of water.

The majority of people in large towns, from their mode of life, of eating and drinking, over-exertion and many unnatural habits, which would sooner be fatal, were it not for the wonderful power of the machine to accommodate itself, and resist such a complication of

efforts to destroy it, have their stomachs more or less in a disordered state, which water would rectify. Abernethy went so far as to say, that in London there was not a *perfectly* healthy inhabitant, and from what I observed during many years of practice, I cannot say that he exaggerated in his statement. However, this state of things admits of great amelioration, and by very easy and simple means—the judicious use of water.

In fine, there is no agent applied to the human body, externally or internally, that has such influence in awakening all the vital powers to their greatest restorative capabilities, in arresting the progress of disease, or preventing, when inevitable, a fatal termination, as pure cold water. It is the most powerful therapeutical agent we possess, the most manageable in its application, the most easily obtained, and the most *certain* in its results. So varied are the modes in which it can be applied, that there is no remedy that can be made to produce so many diversified and opposite effects; a stimulant, a sedative, a diuretic, a sudorific, a derivative, &c., and a *cleanser* and *restorative* in the fullest sense of the terms. Unchaining all the powers of the constitution, giving nature a genial impetus, and leaving uncurbed her desire and efforts to heal; and all this without the necessity of straining any individual function; and after its most mighty results in the *most acute and dreaded diseases*, leaving behind no trace of its operation, no mark or after-suffering, to point out where or how its power had been exercised—a conqueror without blood-

shed—the giver of sound constitutions without levying a tribute—A DIVINE AND UNIVERSAL REMEDY!—universal in its application—universally dispensed for the use of all mankind—AND IN DAYS TO COME, DESTINED TO BE UNIVERSALLY PLACED AT THE HEAD OF ALL REMEDIES.

### THE SWEATING PROCESS.

THIS is effected in a very easy and simple manner. The bedding is removed, and a blanket of the largest size is spread out on the mattress. The patient lying down at full length, is enveloped in it as closely as possible, and so as to fit well about the neck and feet. The best covering over this is a small feather-bed, which must be tucked in about the neck and shoulders, and all the way down to the feet. It is well to elevate the head as high as the patient finds it convenient, or comfortable. In this state he is left till perspiration comes on. It is then allowed to continue for a longer or a shorter time, according to circumstances. It generally takes two or three hours before perspiration begins; but it is a good plan when it is slow, after the first hour, to begin rubbing the hands gently against each other, and up and down the sides, doing the same with the feet, but not so as to fatigue, or affect the breathing. As the packing-up takes place at four in the morning, not to lose any part of the day, the patient has generally a



good sleep for an hour or two. When perspiration has fairly set in, the window is thrown open, and, from time to time, a wine-glassful or two of cold water is given to drink. When it is considered that sufficient perspiration has taken place, the bed and blanket are thrown off, and the patient steps into a bath, (if it be in his room) containing about a foot of cold water, where he is well washed and rubbed, assisting himself as much as possible. Before sitting down in the bath, it is well, as a general rule, to have a bason of cold water at the side, in which he just gives his hands, face, and breast a rub. When the large bath is used, the patient walks to it still enveloped in the blanket, a cloak thrown over if necessary; here he plunges in at once, if it is large enough. Sometimes it is necessary to have two baths, one with cold, the other having water with the chill taken off. In this case, he enters first into the warmer bath, and after a good rubbing, transfers himself quickly into the colder one; where the same thing takes place for a minute or two, returning again to the warmer one. Where the douche is in the house, it is sometimes made use of instead of the bath; I doubt its great utility. After all these processes, he dresses quickly, and goes out to walk for an hour or longer, drinking from time to time a tumbler of water.

*This mode of producing perspiration, followed by the cold bath, was at first thought the greatest discovery, and the most essential modification of the treatment in the water cure. Putting the system through a violent*

purgation by the skin, strengthening this again, and the whole system by the bath, was considered by Priessnitz and his partisans so powerful, simple, and harmless an operation, that no diseased state could resist it. For a long time this went on, and although, in many cases, the results answered their expectations, in many others some mischief and disappointment took place. Priessnitz, however, was too keen an observer, not to see in the end that he had been mistaken in this. There is now a numerous class of patients in which he does not use it, but he has not yet made all the reformation that he will make, I think. Not so, many of his imitators, who continue to this day to practise the errors, which he has been gradually removing for the last three or four years. Conscious of the errors he has fallen into, reasoning always, he is cautious in giving a decided opinion on any point, having learnt from experience that errors are more or less the lot of every system, and that an approach to perfection is only to be gained by constant thought and exertion. But a strange foible and contradiction in such a man is, that he does not like to be reminded of the change in his practice. This application of the cold bath after a profuse perspiration, is thought by the many, and even by most medical men, to be highly dangerous; but, in fact, there is nothing more innocent, or exempt from danger. It is not as dangerous or disagreeable "as two pills over night, and a draught in the morning." The practice of taking a cold bath after sweating is of very ancient date,

having been practised by the Russians and other northern nations from time immemorial, but with this *important* difference—that they produced the sweating by the application of hot vapour. This makes a great difference from producing it by the effort of the body, and the concentration of animal heat; one is much *more debilitating* than the other, and the *re-action* after the bath is not so good or *permanent*. Added to this, there is the great objection of taking hot vapour into the lungs. I took three-dozen Russian baths running, for experiment, and I am convinced of the great difference. The safety of this process, (the contrivance of which is due to Priessnitz) is owing to the calm and absence of irritation in all the internal organs; the fresh air being inhaled by the lungs, and the cool liquid being introduced into the stomach, both of which increase the determination to the skin, and the sweating, when it has once commenced. When the body is in a state of *perspiration*, heated and excited by dancing, walking, singing, or talking, there is nothing more dangerous than drinking cold water, or entering a cold bath. We have numerous examples of the fatal effects of this imprudence. At Naples, during the extreme heat, and while the body is in a state of perspiration, one observes the inhabitants drinking iced water freely, at all the corners of the streets, but the perspiration they are in is in a great measure a *passive* one, arising from, and *kept up* by the heated air. A Polish gentleman told me that a countryman of his, a young physician, having heard



from so many quarters that hundreds were in the habit of taking the cold baths in a state of perspiration, after a long ride, tired and wet with perspiration, he went and bathed in a river; he was attacked with apoplexy, which carried him off a few days afterwards, shewing that he did not understand, or was not aware of, the different state the body is in, according to the mode of producing the perspiration. There is the same objection to the cold bath after any sudorific medicine. Perspiration once set in, is allowed to continue from a period of half an hour to three hours. As a general rule, this transpiration must be put a stop to, as soon as the patient feels a sense of fatigue, and before any feeling of debility comes on.

Sometimes the perspiration is so profuse, and allowed to continue so long, that it goes through the mattress and forms a pool under the bed. It would be but natural to suppose that this process, continued day after day for months together, would cause great debility, and pull down the individual to "the shadow of a shade;" but such is far from being the case in the majority of instances, where it is proper it should be used. Prince L—— told me that he had gone through this process daily for eighteen months. When he commenced, he was weak, reduced, and in a deplorable state of health, with a leg doomed to amputation by all the first surgeons in Europe. At the time I was speaking to him, (and he was still continuing the treatment,) he was in robust health, and in a condition to excite the envy of a

first-rate pugilist. (His case I shall give in the course of the work.)

In most cases, where there is much nervous debility or a tendency to hypochondriasis, where there is much determination of blood to the head, or the existence of chronic inflammation on the digestive mucous membrane, or the alimentary canal, or any of the internal organs, the sweating must not be practised, or with great care and discrimination, and only at intervals. Where these contra-indications do not exist, and the sweating still produces a loss of flesh, or an increased state of irritability, and when the patient does not feel well, and obtain full reaction after the bath, in such cases it is advisable to discontinue it. It is sometimes necessary to apply a wet compress on the forehead before and during the perspiration, changing it from time to time; and there are also cases where the patient is made to sweat in the wet sheet, but they are rare; and when it is thought necessary, it is generally better to omit the operation, for it shews some contra-indication. Whenever there is the least tendency to fever, where the symptoms of a cold or influenza are coming on, the sweating must not be attempted: it generally aggravates all the symptoms. In these states the sweating must be replaced by the wet sheet. I have observed that those whose skins are white and delicate, persons who have much fat, the gouty and rheumatic, sweat easily, and in great abundance. On the other hand, where the temperament is phlegmatic, where there is a tendency to

piles, or congestion of the abdominal viscera, it is not so easy. Sometimes the perspiration is *partial*, not appearing at all on certain parts; this arises from the existence of diseased action, or the accumulation of morbid matter in the part. When this is discovered, it is necessary, previously to enveloping the patient in the blanket, to apply a compress or bandage, wrung out of cold water, to the part. With the repetition of this process, great changes take place; at first the perspiration is small in quantity, clear in its nature, and difficult to be produced; it becomes profuse, and impregnated with the most disagreeable odours, viscid and glutinous, of a dark yellow, and even brown colour, and sour, fetid &c. in its smell. Sometimes there is no mistaking the smell of sulphur, at others very like what is produced by mercurial salivation. When these morbid phenomena appear, the perspiration may generally be considered critical. As a general rule, where there is no evident reason why it should not be used, sweating, followed by the cold bath, is not debilitating; what is lost in one way is repaired in another. The appetite is so much increased, and the functions of the digestive organs so improved, that more healthy fluid is formed than is thrown out. Fat is replaced by hard elastic flesh, and languor and debility give way to a state of cheerfulness and activity.



## THE COLD BATH.

Before entering into the subject of the cold bath, as used in the water cure, I shall offer a few observations on general bathing. The use of cold bathing as a remedy in disease, and as a preservative in health, is known to a great many, I may say to every one. But the idea is generally associated with that of sea bathing, the salutary effects being considered by the majority to be owing, in a great measure, to the salt with which the water is impregnated. Though I am not prepared to deny altogether that the saline particles have any beneficial effects, I am, nevertheless, of opinion that, in most cases, pure water is better. Any influence the salt may have, is so slight, that it can in no way account for the happy results of the sea bath in some cases, or the prejudicial effects in others.

There are many evident reasons why the full benefit is seldom obtained. In the first place, there is a want of regularity in the time when the bath is taken, depending often on the tide; the duration of the bath is also frequently a matter of caprice with the bather. Added to these, there are great numbers who seek this remedy, who are not in a state to enter into cold water without previous preparation. How many do we find complaining after the bath, of headache, lassitude, and indigestion, for the rest of the day. This evidently shews that more harm than good has been done, and that there is something which has prevented the bath "agreeing" with

the patient. There has been a want of proper "reaction," arising from derangement or disease in the internal organs; and it follows, that the morbid condition will be added to, each time that these symptoms are reproduced.

Previously to taking a cold bath, after the method of the water cure, (except in rare cases,) the internal organs are relieved by copious perspiration, or the surface of the body tempered by lying in the wet sheet. Any feverish state, visceral congestion, or irritation, is thus first relieved, and the determination is already towards the surface. In this state the nervous system receives a genial shock from the cold fluid, reaction is complete, and the patient, instead of being dull, heavy, and suffering, is gay, buoyant, and full of pleasant sensations, succeeded by a healthy appetite and easy digestion.

The bath varies in temperature, according to the state or strength of the patient, or the time it may be necessary he should remain in it. At the beginning of the cure, most patients begin with a bath where the chill is taken off the water, contenting themselves with this, or going from this into the cold one near which it is placed, and returning again into the warmer, thus securing a return of the circulation to the surface.

It is of great use to see the patient in the bath for the first time, to observe the effect it has upon him, and to see the state of the skin on the arms and legs, neck, or back. When a person has been accustomed to observe the skin narrowly, it gives considerable insight, when acted upon by water, into the general state and strength of the constitution.

## THE SHALLOW BATH.

This is a bath containing from six inches to a foot of water, and used in the bed-room; it may be cold, chilled, tepid, or warm, according to circumstances. It is not as powerful in one respect as the large cold bath, but from the length of time it may be applied it may be made more powerful; as a common morning or evening bath, the patient remains in it from three to ten minutes, is well rubbed, and has once or twice water poured over his head and shoulders with a basin; he should assist in the rubbing, washing the face well, and lifting the water, with the hands, on the head at intervals. This is the kind of bath that is so useful, and employed by Priessnitz in the treatment of fevers and inflammations, and certain kinds of crisis; the duration of the bath in such cases being indefinite. It has a great advantage over the hip or sitz bath in the treatment of acute diseases, and is now generally used by Priessnitz in preference, for it is found to answer better for several reasons. From the sitting position in which the patient is placed, the feet as well as the hips are in the water, and the former have great sympathy with, and power over, the great nervous centres of the head and digestive organs; the patient is at the same time more manageable. There is another great advantage from being able to apply the water, by rubbing, to the whole surface, thus equalizing the circulation and preventing a chill in



any part; the circulating fluid throughout is more quickly acted upon, and any undue action in the head or chest prevented, at the same time that the determination is still greatest toward the hips and lower extremities.

### THE HIP OR SITZ BATH.

This is taken in a tub, containing sufficient water to reach, when seated, up to the navel, the circumference being sufficiently great to admit of free motion of the arms.

The cold hip bath forms an important part of the general treatment by the water cure. It enters into the treatment of all chronic diseases, being particularly addressed to the abdominal viscera and digestive organs; it has, at the same time, though not so directly, a powerful effect on the heart, lungs, and brain. This bath is generally taken at eleven or twelve o'clock, so as to give<sup>r</sup> time for a walk, and a complete re-action, before dinner; it lasts, in ordinary cases, from fifteen minutes to an hour. During the time that the patient is in the bath, it is necessary to rub the abdomen, first with one hand and then with the other; it increases the re-action, and adds very much to the efficacy of the bath. It is a powerful derivative and antispasmodic, producing a great determination of blood to the hips and skin of the abdomen; it relieves the stomach and liver of any

undue oppression, and by its stimulating and tonic properties improves the appetite and powers of digestion; it increases the peristaltic motion of the intestines; it removes flatulence, colic, spasms, and vomiting of the most violent nature. These curative effects are often produced in a few minutes; I have seen desperate cases where ease was at once obtained; it is almost incredible the short space of time in which this is sometimes effected. It is a powerful derivative in congestion of the brain, headache, different affections of the eyes; it acts as a tonic, and restores the tone of the generative system in a marked manner; in all diseases of the womb and derangements of its functions it is one of the most energetic and valuable remedies we possess, when judiciously used, relieving all pain in a few minutes, and, when combined with the general treatment, acting permanently in relieving engorgement of this organ, and radically curing the first stages of scirrhus, many interesting examples of which I have witnessed and noted. In dysentery its action is equally good. The Marquis D—— and his tutor were at Cracou, where this disease was carrying off great numbers; the latter visited a friend, who died of it, and in two days afterwards he was attacked himself. He immediately put himself in the post for Graefenberg, and he told me he “never knew what real suffering for twenty-four hours was before.” On his arrival, Priessnitz was immediately sent for, who ordered a chilled sitz bath, which immediately gave him relief; they were continued, and repeated

every six hours for the first day, and twice the second day; the third day he was, as regarded any pain or inconvenience, quite well, being able to use active exercise and eat heartily.

Some time ago, this bath was used by Priessnitz in the treatment of inflammation of the lungs and pleurisy, ague, &c.; but now, in the majority of cases, he uses the shallow bath.

At the *commencement* of the treatment of chronic diseases, the temperature is raised from sixty to eighty degrees Fahrenheit.

The first contact with the water is rather disagreeable, but it soon gives way to a more pleasant feeling, and the sensation of chill goes off; the water in the bath becomes every minute warmer, there being a strong current of caloric from the whole system to the parts placed in the bath; before the end of half an hour a powerful reaction commences, the hips becoming red and tumefied. It is a remark which I have heard many make who have used this remedy for some months, that the muscles of the hips become greatly enlarged and much increased in hardness. During the continuance of this bath, there is considerable absorption of the water takes place. All hypochondriacs and dyspeptics have told me that during the time they were in the sitz bath "they found their intellect more clear, and enjoyed a greater command of thought;" in fact, that it was "the only time when they felt their heads quite free." The refreshing effects of this local bath are increased by drink-



ing a tumbler of water slowly during the sitting. It has another curious effect which I shall mention ; it immediately arrests labour pains, and it has been used by Priessnitz for this purpose in cases of protracted labour. A lady of the highest rank at Friwalden told me that in her seventh confinement she was delivered with ease and facility with only two pains, the preceding ones being immediately stopped by using the bath ; during the intervals she slept soundly. The case was of an interesting nature, and I merely mention it now as an effect of the hip bath ; when properly used, it prevents miscarriage, and relieves the sickness which accompanies the first periods of uterogestation.

### THE WET SHEET.

The idea of lying in a wet sheet staggers people more, I find, than any part of the water cure. There are some, indeed, who can imagine that water has some virtues, notwithstanding that it is "*only simple water, that they sometimes drink, and wash their face and hands in ;*" but this strange idea of a wet sheet brings with it visions of damp beds, wretched inns, colds, rheumatism, lumbago, and death. I must confess that this is very natural, for a *wet sheet* and a *damp sheet* sound very much like each other—a distinction without a difference ; but notwithstanding the apparent puzzle, the wet sheet will

remove and cure all the effects of the "damp sheet," or sheets. When a person lies all night in damp sheets, being at the same time more or less deranged in his internal economy, there is great danger that illness in some shape or other will be the result; the equilibrium of the vital functions has been interfered with, the insensible perspiration checked, and the nervous system put into an uncomfortable and irritated state. Priessnitz thinks (for a friend of mine asked him the question) that the alkali used in the washing has something to do with the unpleasant consequences; but there are sufficient reasons, added to those above mentioned, to account for the danger of sleeping in damp sheets, without the one mentioned by Priessnitz, even supposing it had anything to do with it. The *wet sheet* used as a remedy is something very different from a *damp one*; the one is *dangerous*, the other a "*life preserver*."

It is an application which has often, and will full oft again, save many children's tears, many a father's grief, and mother's lamentation.

I shall now describe how it is made and applied, and its effects. A strong linen sheet is dipped in cold water, and wrung till no more water can be expressed without difficulty. At Graefenberg they have a good plan of doing this: the sheet is thrown round a pole, or round rail, and the two ends meeting, it is easily twisted into a cord, and the water wrung out; when this is done, the servant enters the room, and the patient jumps up; the bedding is thrown off, and a large blanket laid out on

the mattress ; on this the sheet is smoothly placed. The patient, lying down full length, nearly on his back, with his head as high as he pleases on the pillow, has the sheet wrapped round him, fitting close just above the collar bones, and down to the feet, which are included ; the blanket is then quickly applied, by drawing first one side and tucking it in well about the neck, under the shoulder, and round the legs, and then the other side over in the same way as had been previously done with the sheet ; a light feather or down bed is then placed over all, and well tucked in from the neck to the feet. In this state the patient is allowed to remain for half, three quarters of an hour, or an hour. For about two minutes the sensation cannot be called very agreeable, but it goes off very quickly, and then it is anything but disagreeable, often very pleasant, producing a very soothing and calming effect. None of the heat of the body being able to escape, it is at first rapidly taken up by the cold sheet ; if in a few minutes the hand be passed over the body and then applied to the sheet, the former will be found to be cold and the latter quite warm. Matters are now changed—it is a cold surface, and a warm sheet, and so the struggle goes on between the two, till both are warm ; when this takes place, the patients take the cold or chilled, the half or full, bath, as may be, dress quickly, turn out for a walk of an hour or so, and drink some tumblers of water, “and then to breakfast with what appetite they have.” The alderman that offered a ragged boy a guinea for his appetite would have given a



hundred for such a one as this, and what would he have said to the quart of strawberries and cream, the fresh German rolls and butter at eight o'clock in the morning?

Independently of the calming effect that this mode of applying a wet sheet has on the nervous system and the internal organs, it has a great power in improving the tone and texture of the skin, increasing its re-active power, and lessening the unfavourable influence that cold and damp, or sudden changes of temperature have upon it. The cold bath is much more agreeable, and taken with much less reluctance after the wet sheet, for it removes that state of the surface which produces a sense of chill or a slight shudder on the application of cold water; it prevents that dry or rough state of the skin which sometimes takes place from applying cold water frequently in the day and for a length of time. After a long journey, or travelling day and night, a wet sheet and cold bath remove every symptom of fatigue, and any disposition to cold or other inconvenience induced by exposure, &c.; all this can be done in an hour anywhere, and the individual finds himself renovated, and in a fit state to undergo any exposure or exertion. After a feverish night, awaking with headache, malaise, or in what is called a state highly bilious, (sometimes from bills, which, like the ducks', are to be provided for,) let this process be gone through, using at first a shallow bath, with ten inches of water, at eighty degrees Fahrenheit, and a good rubbing for five or ten

minutes, and when the individual sits down to breakfast with a keen appetite, gay and exhilarated, he will acknowledge that the wet sheet is worthy of all praise and remembrance, and beats the “two pills over night and the *dismal* draught in the morning” clean out of the field.

In the eruptive fevers of children, nothing can be more admirable than the effects of the wet sheet—in scarlet fever, measles, and small pox, in gastric fever, or a tendency to convulsions,—in fact, in all their indispositions it is a *perfect safeguard*. An erroneous impression prevails that it would drive in the eruption; the effect is precisely the reverse, it brings all matters to the surface with a certainty and promptness that is unequalled, and its own alone.

When there is great heat on the skin, from fever or internal inflammation, the wet sheet is changed as often as it becomes quickly warm, sometimes as often as fifteen or twenty times before the patient is put into the bath; but all this, of course, depends upon the symptoms. It is a powerful antiphlogistic remedy, and, as I have said, possesses at the same time a sedative, soothing and soporific property, calming the pulse, removing feverish heat from the surface, and allaying pain and irritation.

The application of the wet sheet as a remedy I consider as one of the most valuable discoveries that has been ever made in the treatment of disease, whether we look at it in its admirable effects, or the extensive range

of diseased states to which it may be applied with benefit.

The merit of the discovery is due to Priessnitz without any contestation, and had he claims to no further originality than this, it is enough to earn for him the thanks of all those who have experienced its benefits, and the honours with which he will be remembered by posterity.

Many suppose that he hit upon this novel application by accident—I don't think so, I believe he arrived at it by a regular course of inductive reasoning. The wet compress applied to local injuries, to parts inflamed externally, to diseased skin, and over the seat of internal inflammation, he had long used, before he thought of applying the same remedy in a more extensive form; applied locally, he observed that it relieved the parts from *heat* and *pain*, extracted morbid secretions, and produced the most salutary effects. Observing the hot and dry skin, the accompanying feeling of weariness and often of pain in fever, he must have said to himself, why not apply the same remedy to the whole body which I find so serviceable when applied to local parts labouring under heat, pain, &c.? He tried it—and when he saw the result of the operation of the wet sheet in the first case of fever, I can easily imagine him to have been so delighted as to have cried out like Archimedes, “Eureka!” For a long time he only applied it to fevers, but latterly he discovered that it was a valuable remedy in the treatment of chronic diseases; the use of it in



these states, after a time opened his eyes more fully to the abuse which had been committed with the sweating process, more particularly when he found that in many cases the crisis was produced more quickly, and that the recovery was more complete and rapidly produced by the wet sheet than by subjecting the patient to undue or unnecessary sweating; we find, as we go on, that too much purging of any kind is bad, whether it be by the skin or by the bowels.

Most observers who visit Graefenberg for a *short time*, and this is unfortunately the case with them all, go away with but an imperfect knowledge of this important modification of the cure, the wet sheet. What strikes them most, and what they hear most about, is the sweating, followed by a cold bath. And those who visited Graefenberg some years ago, to learn and judge of the system *in four or five days*—or those who practise the water cure, as many do in Germany, from mere hearsay, or from books full of errors,—and without knowing a rope of the ship, or what sail will come tumbling about their ears when they let go one of these ropes,—are still ignorant of the morbid states in which the wet sheet should be applied, and of its vast importance in the treatment of chronic diseases.

There are many cases where there is so great an extent of internal disease, or where the powers of the system are so low, as not to admit of the application of the wet sheet, as I have described. In these cases it is not used at all, or only partially. When such is the

case, the feet are not included in the sheet, in others the arms are also left out, and so on; these slight changes make a great difference in the effects.\*

### THE WET SHEET BATH.

This is used as follows:—The sheet is steeped in cold water, and wrung just sufficiently to prevent its dripping. In this state it is thrown over the patient, who, embracing the fore parts with his arms and hands, commences rubbing his chest, face, and fore part of the person, at the same time that the attendant pursues the same process on the back, loins, and lower extremities. This may be continued for two or three minutes, or more, when it is replaced by a dry sheet, when the same thing takes place, till the patient is well dried. This is an excellent portable bath, and very useful as a daily ablution, and very convenient in travelling. It is always followed by a pleasing and general warmth, approaching a glow, and has great advantages over the usual mode of washing. By its daily use, it renders the surface less sensitive to changes of temperature, and removes the disposition to take cold. After the first in-

\* With the wet sheet, cold bath, and good water to drink, a man who *does not like* scribbling, and who has not been *accustomed to it*, may write a work like the present in thirteen days, and do many other things at the same time, without being much fatigued.

stant, it is anything but a disagreeable application. It is used in the water cure as a preparative, in cases of great debility and in bed-ridden patients, &c.

*In cases of lethargy*, or where the nervous energy is exhausted, it is a valuable remedy, applied every half-hour, or oftener.

### THE WET BANDAGE, OR COMPRESS.

This application is of two kinds—one, in which the wet linen, when applied, is left exposed to the air, producing a cold or a cooling sensation, by the free evaporation of the moisture which it contains, or by renewing it frequently. The other, from which the water is more completely wrung out and carefully protected from the air by a covering of dry linen. This is a warm application, all free evaporation being prevented. When once heated by the skin, it remains at the temperature of the part to which it may be applied.

The first of these, or the *cold fomentation*, is used when there is active, superficial inflammation going on. It reduces the heat, and diminishes the quantity of blood sent to the part. It is applied to the head when there is a determination of blood, inflammation, or delirium. It is assisted by the partial baths, and wet sheet. During the sweating process, it is useful when there is great fulness, or determination of blood to the head, in com-



pound fractures, and all cases where a lessening of action, or the prevention of inflammation is indicated.

The second, or *warm fomentation*, is the most soothing application that can be applied to the external sentient surface. In wounds, and other injuries, in ulcers, &c., it has the most healing influence of any application known.

It was in a great measure by using their “charmed water” in the two modes I have here mentioned, that charlatans made the number of “miraculous cures” we read of in past ages.

Dr. Macartney, nearly thirty years ago, was the first in Great Britain to call attention to the admirable effects of water, applied in this way—he called it his water dressing. Liston of London, and Symes of Edinburgh, have adopted it.

The warm fomentation is used applied to the abdomen, in the treatment of nearly all chronic diseases, more particularly where there is diseased action going on in the liver, stomach, and bowels, or in the large ganglionic nerves behind the pit of the stomach. It is used in the following way—A bandage sufficiently broad to reach from the pit of the stomach, to an inch or two below the navel, and long enough to meet when passed round the abdomen; after being dipped in cold water, it is wrung as dry as it can be; over this, a dry bandage of thick linen or cotton is applied, sufficiently tight to be comfortable to the patient. This is worn day and night, and renewed when the wet bandage becomes dry.

This is, in fact, a continued fomentation or poultice. It draws to the skin and general covering of the abdomen, any undue action in the lining membrane of the stomach and alimentary canal, reducing the irritation or sub-inflammation; also by its soothing and sedative properties regulates the bowels, increasing the peristaltic motion, and facilitating the expulsion of fæces. After a time, more especially when there is a tendency to crisis, the bandage, when washed, is found to be saturated with different secretions from the skin, making the water *thick and turbid*. And frequently a curious phenomenon takes place, which has not yet been explained. After the bandage has been worn some weeks, there is a secretion thrown out on the skin of the stomach and abdomen, of a *beautiful dark blue colour*; this continues for a week or two; sometimes ceases suddenly for weeks, and returns again. It is of frequent occurrence, and I have always found it of precisely the same colour. As yet I have only seen it in bad dyspeptic cases, and where mercury had been taken at some previous period. I had a number of specimens collected, to be submitted to analysis, but they were lost. This water-dressing is applied to eruptions, and different kinds of local affections that appear during the crisis, to gouty hands and feet, &c. This warm fomentation relieves heart-burn, spasms, and the train of symptoms accompanying dyspepsia. From the length of time it can be worn without any inconvenience, it is an excellent panacea, and a valuable adjunct to the general cure.

When the wet compress, or bandage, is applied to the stomach, it is advisable, in many cases, to confine the *wet part* to the front of the abdomen only, not extending all round, as used at Graefenberg indiscriminately. When the patient is weak and irritable, it produces sometimes a feeling of great discomfort, which should in all cases be avoided; this is seldom the case when this change is made. There are also a great many who had better omit it at night, or wear it only while walking.

### THE DOUCHE.

This is formed by a column of water, descending perpendicularly from ten to twenty feet, and from one to six inches or more in diameter. To prevent its separating into a shower bath, when the fall is great, it is better to have it conducted through a tube for some distance in its descent. The best time for taking the douche is after breakfast, from ten to twelve o'clock; it is used, however, before breakfast, and in the evening in certain cases—a long walk, or sufficient exercise being taken beforehand, to produce general warmth and activity in the system. Before commencing the douche it is prudent to let it fall first on the palms of the hands, washing the face, head, and chest. It is then allowed to fall slanting on the shoulders, hips, and loins, gene-



rally avoiding the abdomen, always the stomach. By elevating the hands, and forming a roof over the head, it is then allowed to fall perpendicularly on this part, separating the column into rays, and acting as a shower bath on the rest of the body. In many local affections, in weakness or paralysis of the extremities, the part is more particularly subjected to the influence of the douche.

The powerful effect of the douche bath has been known for ages, but it is only of late years that its effects have been fairly studied, its many valuable properties appreciated, and its application in disease reduced to something like a rational system. The reason why this has been the case (and the same remark is applicable to each of the different modes of using water), is, I believe, sufficiently obvious. To obtain all the remedial action resulting from any one of the diversified modes of applying water, it is necessary that the major part of them should be used conjointly—the effect of one hanging upon the other, and increased, lessened, or modified, in its ultimate operation. Till the time of Priessnitz no man of genius had devoted all his powers exclusively to the study; many had inklings of the virtues of certain applications of water, others prophesied what has since taken place—that water, from the varied effects it can be made to produce, is, as nearly as possible, an universal remedy,—resembling in its properties, as elicited by the endless modifications of which it is susceptible, all our most potent drugs, including

bleeding, leeching, and blistering. But with this great advantage, that it is more certain in producing the effect desired, and not followed by the destruction and mischief which so often follows the action of medicines, whether drawn from the animal or vegetable kingdoms; and the same remark applies to bleeding and blistering.

To return to the douche. It is taken from two minutes to half-an-hour—five or ten minutes being the ordinary time. When an individual is somewhat advanced in recovery, after a few minutes' douching, the whole surface of the body assumes a beautiful deep rosy colour, followed by a general feeling of activity and well-being, producing courage in the mind, and tone in the muscular system, with an inclination to active movement. These effects, however, are not so strongly marked where the skin is still in a weak and disordered state, or where there is chronic disease existing in the abdominal viscera, preventing its full action, "or where there is much 'bad stuff' circulating throughout the body." The douche is a powerful auxiliary to the general treatment, but requires great discretion, a careful inquiry into the nature and state of the constitution of the patient, and a knowledge of the pathological state he may be labouring under. It puts the whole system into a state of activity and excitement, forcing the circulation to the surface, acting on the stomach and bowels, and increasing the activity and wakefulness of the senses in a marked degree. When used at the proper time, it forwards the crisis that the system may

be preparing, and produces eruptions, &c., on the skin. It changes the quality of the perspired fluid, and causes immense deposits to be thrown out with the urine. All the other parts of the treatment of course also conduce to this state of matters.

In cases where there is chronic disease of long standing in the abdominal viscera, more especially when accompanied with debility or much irritation in the ganglionic system of nerves,—where the functions of the brain are disturbed, or there is reason to suspect that there is change in its structure, the douche must be used with discretion, and with the greatest watchfulness, generally not at all. When any feverish or nervous symptoms shew themselves, it must be suspended till these go off; or, in fact, when it produces any undue excitement or sleeplessness.

At first there is a sensation of fear when the noise and splash of the descending water is heard, but after the first essay this goes off; nor does the patient ever *willingly* return from a larger douche to a smaller one. Taking the douche is not nearly as disagreeable as a shower bath, and is generally looked forward to with pleasure.

### THE FOOT BATH.

This is taken in a shallow vessel containing from four to six inches of cold water; it lasts from five minutes to an hour, during which period the feet are to be well



rubbed by an attendant, or the patient rubs each foot alternately with the other. It is used as a derivative in congestion of the brain, headache, threatening apoplexy, wet compresses being placed on the head at the same time, and frequently changed; but this is not often necessary. It acts on the abdominal viscera, and excites the action of the uterus. It is the best local remedy for habitual cold feet, keeping them in a glow for the rest of the day, and with repetition *permanently* restoring the warmth and circulation in them. To ensure a speedy reaction, the feet must be warmed by rubbing or exercise, before putting them in the cold water, and immediately after the bath exercise must be taken. A certain way of warming the feet and keeping them so, is by drawing on a pair of cotton socks *well wrung* out of cold water, over these another pair of thick dry ones, and a pair of large boots. A walk in this state warms the feet immediately, and they remain in a glow the whole day. The warm foot bath is the reverse of all this.

### THE HEAD BATH.

The patient lies full length on a mattress, or on the floor, a dish containing two or four inches of cold water is placed so that the back part of the head rests in it, sometimes turning the head on the right side, sometimes on the left, as may be indicated; this lasts from five to twenty minutes. It is a highly useful remedy in affec-

tions of the brain, eyes and ears, in convulsions from teething, hydrocephalus, &c. It is used in the treatment of fever, when there is determination to the brain, or delirium, *being placed under the head while the patient is in the wet sheet.*

## PARTIAL BATHS.

The ELBOW BATH is used in inflammation and injuries of the hand and forearm. The elbow is placed in a basin containing about six inches of water, the part affected being elevated, and covered with a wet compress. It gives great relief, and assists in rapidly reducing inflammatory symptoms.

The HIP BATH is used for the same purpose, when the knee or the leg are the parts to be relieved.

There is another partial bath which is highly useful—the LEG BATH. It is taken in an oval tub, about a foot in diameter in its widest part, and reaching up to the bend of the knee. In this the whole leg is inserted, the water being of higher or lower temperature, according to circumstances. It is applied in diseases of the bones, the joints, or the skin, in ulcers of long standing, &c.

THE  
TREATMENT OF DISEASES  
BY WATER.

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I HAVE before me a very learned and useful work by an eminent physician, now living in “Modern Athens.” It is on diseases of the stomach, intestinal canal, the liver, and other viscera of the abdomen. It contains the examination of a great number of fatal cases; and they who would “sup full of horrors,” will find in this volume wherewithal to satiate for ever. What are a *few* of the deepest tragedies to these *prevalent* diseases and their attendant sufferings? I shall present the reader with a specimen or two,—and do not tremble too much, ye *drinkers of spirit* and *sensual gormandizers*, who wantonly undermine and destroy one of the most valuable gifts of living beings, converting yourselves into a complication of impurities, and in the end becoming a locomotive museum of morbid anatomy. It is never too late to attempt a reform.

The worthy Doctor says that the following case of  
“extensive CANCEROUS ULCERATION OF THE STOMACH,



is perhaps one of the most extraordinary examples on record." It may be as regards the record, but I have distinct recollection of eight cases which came under my own care and post-mortem examination, equal to, and exceeding, if possible, the ravages in the following case. Some of them are still in their favourite spirit. They were all gin, hot brandy and water, and whisky drinkers, and people with powerful constitutions.

"An individual, aged forty-nine, had been in bad health through the winter 1811-12, complaining chiefly of weakness, and a constant uneasiness across the region of the stomach, with occasional attacks of acute pain towards the left side. In May, 1812, she began to have vomiting, which continued from that time, and became more and more urgent. I saw her in July, and found her much emaciated; she complained of a dull pain in the epigastric region, where considerable hardness was felt; and she vomited a portion of everything she took, sometimes immediately after taking it, and sometimes a considerable time after. She continued with little change till the beginning of September, when the vomiting subsided, and she was free from it for more than a fortnight. But during this time she was affected with diarrhoea, her strength sunk, and she died on the 23rd, the vomiting having returned, though with less severity, three or four days before death. During the period when she was free from vomiting, she took food and drink of various kinds, and in very considerable quantity, and continued to do so till a few hours before

death. *Inspection.*—On opening the abdomen, and looking for the stomach, a large irregular opening presented itself, which was found to lead into the cavity of the stomach, in consequence of a large extent of its great arch being entirely destroyed. In the left side, there was a large irregular mass, which appeared to consist of an enlarged and diseased spleen, and the remains of the great arch of the stomach, so blended into one mass that it was impossible to distinguish one part from another; in the substance of it there was a cyst full of very fetid matter. This mass was attached to the cardia by a narrow portion, which remained, of the coats of the stomach at that place; and when the parts were taken out and displayed, by suspending the stomach by the cardia and the pylorus, the appearances were very remarkable. When stretched out in this manner, about one-half of the stomach at the pyloric extremity was sound and healthy. This part was attached to the cardia by a narrow portion of the small curvature which remained; and by another small portion of the greater curvature, the large irregular mass now referred to hung down on the left side. The left side and lower part of the great arch of the stomach was entirely wanting to such an extent, that, when the parts were extended in the manner now mentioned, it seemed as if nearly one-half of the stomach had been entirely destroyed. There was reason to believe that the part which seemed to be wanting was involved in the diseased mass on the left side. The sound parts were

separated from this portion by a line of ulceration of such extent, that the pyloric extremity remained attached to the cardia only by a portion about two inches in breadth which remained of the small arch. The ulcerated edge, where the separation had taken place, was studded with numerous hard tubercles like the edges of a cancerous ulcer. The pancreas was hard; the liver was pale and soft; the other viscera were healthy."

"A gentleman, aged sixty-five, in September, 1820, was seized, during a journey on horseback, with diarrhoea, the motions being black and pitchy. He then had pain in the region of the liver, which for several days was so severe, that he could not bear the motion of his horse. It then subsided considerably, and after his return home in the end of the month, he was able to walk about a good deal, without appearing to suffer much uneasiness. On the 1st of October there was increase of the pain, with fever, and the pain extended to the right shoulder. He was now **LARGELY BLED** and **BLISTERED**, &c., and the acute symptoms were soon removed; but he was never free from pain in his right side, and, after some time, he began to have cough, with copious mucous expectoration. He took mercury with **APPARENT** relief, and for a short time was better; but in the end of November he began to lose flesh, and the pain in the right side continued. I saw him for the first time on the 11th of December; he was then much emaciated, with some dropsy of the limbs; there was



still fixed pain in the region of the right lobe of the liver, but nothing could be discovered by pressure, and there was no appearance of jaundice; the pulse was frequent and weak. The debility and dropsical symptoms increased progressively, and he died, gradually exhausted, on the 5th of February.

“*Inspection.*—The liver scarcely exceeded the natural size; its edge projected somewhat below the margin of the ribs, but had not been felt on account of a very firm attachment to the arch of the colon, by which it was bound down and thrown backwards. Its whole structure was altered in a remarkable manner from the healthy state; externally, it was closely covered by innumerable small semi-transparent tubercles, set very close together, and the largest of them scarcely exceeding the size of a split pea; internally, it was soft and of a white or ash colour, very much resembling the substance of the brain, and in many places almost of a pulpy consistence; scarcely the smallest portion could be discovered that retained anything like the healthy appearance. There was considerable effusion in the abdomen; the other viscera were healthy.”

This, I think, will be enough for the reader; but in the book, which is not very large, there is morbid anatomy enough to make preparations that would fill one of the large rooms in the British Museum. In the author's learned preface, I find the following observations, which I shall extract, and add thereto a few comments:—

“*The Preface.*—Nothing appears to have had greater influence in retarding the progress of knowledge, than misconception in regard to the *proper objects of scientific inquiry*. It was in this manner that so much talent was wasted and lost in former times, when learned and able men devoted their attention to searching after the hidden causes of events; and the great purpose of the illustrious fathers of modern science was accomplished, by bringing back the attention of inquirers to objects which are within the reach of the human faculties. We often talk of the philosophy of Bacon, without fully recognizing the important truth, that the philosophy of Bacon and Newton consists entirely, to use the words of an eminent writer, in ‘*ascertaining the universality of a fact.*’ This cannot be better illustrated than by a reference to that department of science, in which the philosophy of modern times is so distinguished above the conjectures of former ages. The theory of gravitation, even extended as it has been to the great phenomena of the universe, is nothing more than the *universality of a fact*. Of the cause of that fact we know nothing, and all the investigations of Newton were carried on independently of any attempt to discover it. ‘When Newton (says Mr. Stewart) shewed that the same law of gravity extends to the celestial spaces, and that the power by which the moon and planets are retained in their orbits, is precisely similar in its effects, to that which is manifested in the fall of a stone—he left the efficient cause of gravity as much in the dark as ever, and only gene-

ralized still further the conclusions of his predecessors.' If medicine is *ever* to attain a place among the inductive sciences, its first great step towards this distinction will be made when medical inquirers agree to restrict their investigations to *ascertaining the universality of a fact*. By adhering to this rule, we shall avoid two errors which will probably be admitted to have been frequent in medical reasonings, and to have had no inconsiderable influence in retarding the progress of medical science. The one is the construction of hypothetical theories, or the assumption of principles which are *altogether gratuitous and imaginary*; the other is the deduction of general principles or conclusions from a limited number of facts. Doctrines of the former class may be considered as almost independent of observation; and those of the latter kind, though they have an apparent foundation of facts, are framed without due inquiry whether these facts *are universal*. The confidence is, indeed, remarkable, with which general statements of this last description are often brought forward, and the facility with which they are received, without due examination, as established principles. We even find some writers expressing such confidence in their deductions, as to talk of *general rules in medicine, with exceptions to these rules*; and in this manner *new observations*, by which the rules might be corrected, are overlooked or forgotten. Such a phraseology, indeed, must probably be considered as at variance with the principles of sound investigation. We are in the habit of talking of general



rules in grammar, and exceptions to these rules, because we know the precise extent to which the rules apply, and the exact number of instances which form the exceptions; *but in physical science, to speak of exceptions to a general rule cannot be regarded in any other light, than as an admission that the rule is not general, and consequently is unworthy of confidence.* The best means of avoiding the errors which have now been referred to, will probably be, to keep in mind the important principle, that the object of *physical science* is, ‘to ascertain the universality of a fact.’ *A considerable number of medical doctrines, there is reason to apprehend, will come out of the examination in rather an unsatisfactory manner, if we apply to them the tests which this rule would furnish, namely—are they facts, and are these facts universal?* The object which the author has proposed to himself in all his medical researches has been to furnish facts in a concise and accessible form, and to advance to conclusions by the first step of the most cautious induction. If, in following out this course of investigation, he has sometimes had occasion to *call in question* doctrines which have been *generally received*, he has only to appeal to the principles which have now been stated. To opinions which have been received by others he would never presume to oppose mere opinions of his own; but he cannot hesitate to submit both to the test of observations which are calculated to ascertain *whether they are facts, and whether the facts are universal.*”

Now I should like to inquire how far this desirable

*universality of a fact* is applicable to the work before me.

I may venture to say, *en passant*, that I am also in search of this desideratum, this universality of a fact, whose consolatory influence on the mind I should feel as much as the learned Doctor I have been quoting from. I have looked through the book to ascertain the applicability of his prefatory remarks to its contents. I must confess I do not find them as apropos as they might be, nor do I find very much to lead to the attainment of the knowledge of this *universality of a fact*. However this may be, I am pretty sure the amiable author would be the last person to desire that such *facts as he describes were universal*. But how is it that I find nothing said that could give one an idea how such dreadful facts as he describes were brought about—they could not have dropped suddenly, “like the gentle dew, from heaven, upon the place beneath.” What was the mode of life of these unfortunate individuals? how many courses of mercury had they taken? how many thousand *draughts* of spirits, or of those nicely wrapped up from the druggists, had they swallowed? How many thousand pills *not patent*, or of Herr Morrisons, had travelled through their *unfortunate stomach and bowels*? How much arsenic and quinine had they taken? or what endless round of unintelligible compounds had been poured down their throats? The author is as silent on these points as the patient, and leaves it to our imaginations. The facts are nearly useless without a

knowledge of the more evident causes ; because, when they arrive at the states he describes, they are hopeless, and only serve as warnings, or subjects to excite terror. He says, the best mode of avoiding the errors which have now been referred to, will probably be to keep in mind the important principle, that the object of *physical science* is to ascertain “the universality of a fact.” How far does this physical science apply to the practice of medicine, and to the living human body? The moon and the earth have no nervous systems, nor “a circulation of the blood ;” they do not die by a mental emotion, nor are they subject to *fever, or cancer of the stomach ;* NEITHER HAVE THEY MOUTHS AND STOMACHS TO RECEIVE INCONGRUOUS PHARMACEUTICAL PREPARATIONS. In the *chaos* of medical practice, where are we to hunt for “the universality of a fact?” It would be more easy to find it in Mr. Murphy’s weather guide. One eminent doctor tells you that a rational treatment of disease, according to a *sane physiological doctrine*, is all nonsense, and that it is better to trust to blind empirism, and try anything that comes uppermost. Another swears by the lancet ; while his equally learned friend asserts with equal assurance, that the former gentleman, and those that follow the same practice, with their *tiny weapons* dispatch more people to their “long homes” than was ever done by the sabre. One sleeps with the pharmacopœia under his pillow, and thinks the world would not turn round if wholesale druggists were not admitted on change, or if anything stopped the importation of drugs. An equally



learned professor, with a class of three-hundred students, declares to his intimates that, "*If there were no such things as drugs, it would be the greatest boon to humanity.*" How are we to reconcile the contending parties, and get at "the universality of a fact?" I know of no better method, than by WASHING OUT THEIR DIFFERENCES WITH WATER. Notwithstanding all I have said, I must observe, that in the present state of man, it is of the greatest utility, and absolutely necessary for a perfect and useful practice, to ascertain the precise seat and nature of disease, as well as the various morbid changes of which each organ of the human body is susceptible; but it is still better to prevent an evil, than to remedy it, or to ascertain the *fact* when it has become incurable. In our endeavours to find "the universality of a fact," the following propositions are, I think, well worthy of attention, in order to discover how far they agree with our present knowledge, and how far they may be confirmed by future observation.

### *Propositions.*

The majority of people do *not* live temperately, give little or no consideration to the subject, not being aware of its wonder-working powers.

1. All people who do live temperately, are freer from pains, aches, and diseases, than those who do not; they live many years longer, and die easier deaths.

2. When the parents have diseases which they acquire by an improper mode of living, it does not end with

them—they are left as a legacy to their children, who again hand them down from generation to generation, becoming more complicated and difficult to remedy.

3. All people who drink water are more cheerful and healthy, eating, drinking, sleeping, and working, with more pleasure than those who take liquid stimulants of any kind.

4. All people who eat moderately, and of a simple diet, are better *in every way* than those who eat as much as they can, or of a variety of highly-seasoned dishes.

5. All people who avoid drugs, are more healthy, and freer from disease, than those who get into the habit of taking them for every symptom.

6. If the practice of medicine was not very ineffectual, so many hundreds would not be flying off to all kinds of hot springs on the continent, applying for aid to quacks and impostors, to the “hocus-pocus” system of homeopathy, with its beyond imagination small doses, its substitution of *hungry fleas* instead of *leeches*, and its *good system of diet*; and last, but not least, the daily increasing drafts of patients taken out of both the former systems by the water-drinkers, would not be so great.

7. The “*water cure*,” and the system of living which it teaches, will, when understood, prevent the occurrence of slow or chronic disease, and prevent the fatal effects of any inflammatory or acute disease, and ultimately put an end to hereditary diseases.

8. Very many patients can walk about, and even enjoy themselves with the treatment by water, having at

the same time medical and surgical diseases, of which they would be in a dying state in any hospital or sick room in Europe, or England.

9. Errors in the treatment by drugs, bleeding, blistering, &c., are more *fatal* than errors committed in the “water cure.”

10. The “water cure” has *common sense* to recommend it, *many agreeable accompaniments*, and *few deaths*. The practice of medicine has *custom*, *prejudice*, and *influence*, *no enjoyments*, and *great fatality*.

11. In the most severe and dangerous diseases, the action of water is *certain*; that of all medical measures *uncertain*, and often hurtful; or, as a celebrated practitioner said, “It is terrible guess-work, with the best of us.”

12. By the “water cure” we may arrive at “the universality of a fact,” by the practice of medicine I fear *never*.

A few dozen more propositions of the same kind might be added, but for the present there is neither time nor space.



## DRUG DISEASES.

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THERE is an interesting class of diseases, which may be studied at Graefenberg as well as elsewhere, with great advantage; they are not much talked of by medical men, or largely descanted upon in the schools, nor do we find them holding the very prominent place they deserve in systematic works on medicine; they may, for want of a better name, be called *Drug diseases*. Many of the most desperate cases—indeed, many of the incurable, I have seen, owed their forlorn state to little else than mercury, quinine, arsenic, and purgatives,—Morrison's, though last, not least; the most hopeless cases of ruined nervous systems, destroyed stomach and bowels, arose from one or the other of these powerful medicines, given with little care or caution;—one had a slight ailment removed at the expense of finding his bones rotting afterwards; another had a still lighter complaint removed, but paying for it by low spirits and despondency the rest of his days; and thus it goes on, through a host of diseased states more or less severe. In the Anatomical Museum at Breslau, the celebrated anatomist Otto has placed an interesting collection of

human bones, which are full of mercury ; between the plates, and in the cancellated structure of the bones of the skull, the mercury is seen in large quantities. There was a celebrated anatomist at Graefenberg when I was there, who told me he had a complete museum of the same kind. I promised him not to mention his name, as he said, "I hold a position in the juste milieu, and I wish to reconcile rather than offend either of the contending parties ; I wish to steer clear between the fiery drugman and the cool water advocate." He was going through the "water cure" incog.

When establishments for the treatment of diseases by water are formed in every part of England, which I make no doubt will be the case in a very short time, they will ultimately have the effect of mitigating, and it may be hoped removing altogether, the long list of drug diseases ; I will go further, and say, that I have no doubt that consumption, which now carries off its thousands and tens of thousands, with scrofula, gout, and a number of hereditary diseases, will become unknown, and almost forgotten—a tale of former times. The influence of these establishments will sooner or later be felt by the whole community ; they will become summer resorts for a course of scientific bathing, and they will be made the most agreeable centres of re-union ; all persons leaving them will be so many missionaries of temperance, filled with the ardent desire that all should participate in the good they have experienced, and the immunity from pain which they enjoy from their new mode of life. In

a country like England, where there is such free inquiry, and such rapid circulation of thought, it will be carried on by railroad, and at a railroad pace. Consider, for a moment, what a compound multiplied effect this will have on generation after generation, gaining new strength at every fresh start, the power accumulating by additional numbers, by the intenseness of conviction, by *habit*, and by *example*; at every step there will be fewer sins of the parents to be visited upon, and descend to, the children. *There will be more benevolent feeling abroad*; it will be cultivated for its own sake, from the more full appreciation of the pleasant feelings which it brings with it; from the great influence its enjoyment has in increasing and perpetuating a healthy state of the mind and body. *Benevolence is a powerful medicine, and may most truly be called its own reward*—"they who joy would win, must share it, *happiness was born a twin*." On 'Change, we hear that money makes money; but they don't tell us it does something more than this—that it makes *disease*, that it makes men envy and hate each other, that it makes the majority dissatisfied with their lot, not knowing that the possessors of wealth are, ninety-nine times out of the hundred, anything but objects of envy or hatred, claiming rather, from a thousand causes which are concealed behind the curtain, their commiseration.

There are few who do not like and anticipate with pleasure the sweets of independence; there is a shorter road to it than most people imagine, and this short cut is to the only real independence—Temperance; and it is



within the reach of every one. How little a temperate man requires to keep him in health, strength, and spirits ; he has always something to spare, and the very act of living, of eating, sleeping, and using his limbs, are pleasures. An old coal-cutter, who had become temperate, told me, “ For years I used to return to my work, after drinking and two or three days idling, with a splitting head-ache, which I did not work off for the first twenty-four hours, it was very bad to go through ; my wife and family were always in want ; but now, with the good wages I have, and they are the same as I always had, we have enough of everything, and my work is light compared to what I felt it before.” Coal-cutting is hard work while it lasts ; the workman is on his knees, or sitting, while he is hacking away in his hole ; they do not, however, work above three or four days in the week, and get very high wages, the idle time is generally spent in the ale-house.

If a man has continual head-aches, low spirits, the gout, or any other similar infliction, it does not signify what his position may be, *he is not independent*, he is in the power of a greater and more disagreeable tyrant than any absolute taskmaster can be. Let not any one be so blind or unthinking as to regret that he has an occupation, or is obliged to work ; labour is itself a pleasure when accompanied by health. Observe people who have nothing to do, how they yawn, and grasp at anything to engage their time ; those who, after making money, have retired, are seldom so happy, and are often

glad to return to their occupation, of which we have many recent instances, Sir Astley Cooper, for example. I repeat, a really temperate man cannot be otherwise than independent; he and his children are healthy, and beyond the reach of want. Suppose a man has 300*l.* a-year, by a rational and a much more pleasurable mode of living he can save at least from 80*l.* to 100*l.* a-year in *drugs*, wines, spirits, beer, &c. &c.; and it must not be forgotten in the account, that, besides *paying* for the *drugs* there is the *taking them*, the very mention of which suggests a catalogue of pains and aches,—“Think of that, Master Brook!”

## G O U T.

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DEFINITION.—Gout is an hereditary disease, produced by infringement of the organic laws, the offspring of intemperance, AND THE PUNISHMENT OF DISOBEDIENCE; handed down to the children from generation to generation, with all its pains and penalties, undiminished by any legacy-duty or *medical treatment*.

Where this prevalent disease is not inherited from the parent, but acquired, the person making the acquisition may truly boast of being the *founder* of the disease, *the first gouty person in his family*. We hear it called a “*fashionable* complaint,” even a “*genteel* disease,” which, though having some foundation, as being more particularly “*enjoyed*” by the richer and more luxurious classes, yet, as a large portion of the middle ranks, as well as the poorer part of mankind, who drink much spirits and fermented liquors, claim a tolerable portion of this infliction as their own, their “*bettors*,” in this possession, cannot be considered “*exclusive*.” Gout and rheumatism run into each other by such insensible degrees, that the term used in common life of “*rheumatic gout*” is strictly correct; this arises from the same structures



being attacked in both diseases, and from the similarity with which they both disappear, as well as from their mutual tendency to leave the external, and *fly to some internal part*. But it is of some consequence to distinguish between the two; this is discovered by the joints principally affected, the progress of the symptoms, and the *causes* which give rise to the two diseases. *Regular* gout is the result of a modified inflammation of the stomach and duodenum, (or that part of the alimentary canal which proceeds from the stomach, and in which is the opening of the bile ducts,) followed by a similar state of the fibrous membranes of the joints on exposure to cold, &c. &c., beginning generally with the GREAT TOE; there is another kind of gout, which we call *irregular*, being not so inflammatory or well marked; and there is a *third* variety, which may accompany the two species I have mentioned, this is where it attacks some internal organ—the brain, the heart, the lungs, &c., leaving the external part in which it was going on, and attacking those parts just mentioned.

Before an attack of gout comes on, there is more or less fever and other symptoms, shewing that the digestive organs are in a state of suffering; there is coldness of the feet and hands, numbness, a sense of pricking or itching, disturbed sleep, costive bowels, &c. &c.; at last, with more or less shivering, followed by fever, an intense pain is felt in a joint—this generally takes place very early in the morning; in a few hours the part becomes red, swelled, and very painful to the touch. This state

goes on for some days, when the attack gradually wears off. During this state of PUNISHMENT, which is like a continued blister to the joint, and the abstinence, from *want of appetite*, the patient finds himself better than for some time before the paroxysm came on. I write feelingly on this subject, for I once—and only once—had an attack of gout; this lasted during a journey from Liverpool to London in the mail, the result of drinking too much Madeira and other stimulants when on a visit at Christmas to some too hospitable friends: truly does the peasant philosopher of Graefenberg say, “*Our enemies can do us but very little harm, ’TIS OUR FRIENDS WHO KILL US.*” But what I have described above is only a *slight attack*, a paroxysm, the first scene in the eventful history which I am now relating. By degrees they become more frequent and severe, the general powers of the constitution becoming more and more influenced by the disease; other joints begin to suffer, till, by its ravages, scarcely a joint of the body escapes; their motions now become impeded by stiffness, and at last they are deprived completely of the power of movement — this is caused by thickening of the part, and by a quantity of chalky matter, which is deposited, producing unseemly swellings, while fresh inflammation supervenes to aggravate the sufferings of the patient. Now general constitutional disturbance comes on, with feelings of great depression; during the night, cramps attack different parts of the body; added to this the patient is tormented with palpitation, heart-burn, and a cough, and the body be-

comes a mass of disease, and the continuance of life in great danger of being soon arrested.

The gout has now a dangerous tendency to fly to some vital organ, as it is said; that is, the stomach, intestines, heart, or brain, &c. are in danger of a fatal attack of inflammation. It is a popular notion, and was for a long time the doctrine, that it was some morbid or acid matter, that flew from the joints to the organs I have mentioned, and caused the mischief; this, however, is not the case, and is an opinion long exploded by all scientific pathologists. It would be just as rational to say that the delirium when it is made to cease in the brain, had *flown to the toes*, as that the *gouty humour* of the toes had flown to the brain, and caused the delirium. Many people have the unfortunate idea that an attack of gout is healthy; this blinds the patient to his danger, and leads to a system which, in the first instance, establishes the disease in the constitution, and in the end undermines it. I need not refer again to the causes of gout, merely observing that women very seldom have it, which in itself speaks volumes. Gout has never been cured by any medicinal treatment, the system being merely to relieve the urgent symptoms. One remedy in most common use is colchicum. This poisonous irritant curtails the fit of gout, and therefore is a great favourite; but it is dearly bought; it centres the morbid irritation in the digestive organs, and prevents it flying to the joints, as it is said; the invariable consequence of this is, that matters are hurried on to the last scene



of all, the fits come on more frequently, and the disease makes more rapid strides to a confirmedly chronic nature. I was on my way to Italy many years ago, with a right honourable gouty patient—a most estimable man—who died from the effects of the enormous quantity of this irritating poison which had been administered to him by a fashionable physician for many years. He paid dearly by secondary sufferings for this deceptive relief, for he would have had otherwise a constitution to have lived easily to a hundred. A physician told me that his father had cured himself of gout, after having suffered with it for many years; he did this by ploughing his own fields, and living on the plain food of a ploughman, a mode of cure which he always spoke of with pride. The general medical treatment does not concern me further in this work, I shall therefore go on to the treatment by the “water cure.”

The general treatment of gout by the water cure, is by the daily practice of the sweating process, followed by the cold bath, the hip bath, foot bath, and douche; the warm fomentation being more or less applied to the affected extremities. But there are many exceptions to this general plan. Where the constitution is feeble, the application of the wet sheet, alternating with the sweating, or exclusively, while there is any fever or approaching attack, must be used. Though sweating is an excellent remedy, and highly beneficial in this disease, from erroneous views of the essential nature of gout, it has generally been carried too far, producing irritation

and debility, which are by all means to be avoided. When this mistake is committed, the patient is thrown back, and has to wait longer for his restoration to a healthy state. The hip bath, as in all cases where the abdominal viscera are engaged, is an indispensable adjunct to the treatment. The douche also performs an important part in stimulating the vital functions, strengthening the skin, and drawing morbid action and matters to its surface, but, as in all cases, attending carefully to contraindications of its use. The water dressing, or warm fomentation is kept constantly applied to the feet, legs, and hands, when they are painful or inflamed. On my arrival at Graefenberg, I found only one of my countrymen, Mr. —; he had been under treatment for gout for many months; he told me that he had suffered from it for five and twenty years; he had visited Carlsbad for several seasons, and had tried all other remedies with little good results. For the two winters preceding his arrival at Graefenberg, he had been nearly bed-ridden, suffering with unremitting fever; he had considered his case hopeless, and sought the water cure contrary to the advice of all his friends, and as his dernier resort. When he arrived at Graefenberg, which was at the approach of winter, he walked, or “rather hobbled,” with the aid of two sticks, “and his nose nearly touching the ground.” During the whole of this *severe season*, and very severe it is, he went through the full treatment, AND WAS NOT CONFINED ONE DAY TO THE HOUSE; he made progress beyond any san-

guine hopes he could have formed, his fever completely disappeared, and his appetite and sleep returned, and were better than he had enjoyed at any interval for more than a dozen years. In the spring he walked erect with only one stick, carried more from habit than for use. The following winter he pursued the same treatment, but with greater energy, going every morning from the sweating process under the douche. By this *overdoing he lost ground*, and though enjoying excellent health, there was a return of stiffness in the legs. The incessant attacks of gout with which he had been afflicted had become few and far between, occurring at intervals of months, and these attacks being relieved in a few days by appropriate treatment. At the time of our meeting he had corrected the error he had fallen into, by diminishing the treatment, had become stronger, and walked up steep ascents with tolerable ease. I left him full of hope of a favourable issue. I had a letter from him some time ago, in which he gives me a favourable account, full of hope, and expressing satisfaction. But it will take some time to regain the lee-way that has been lost, I think; but it is a pleasant life to lead.

When an attack of gout comes on, if the fit is accompanied by much constitutional disturbance, the general treatment is arrested; instead of sweating, the patient must lie in the wet sheet, and the temperature of the bath be raised to 60 or 80 degrees, in which the patient remains for five or ten minutes, the whole body being well rubbed during the interval he is in the



water, the bath containing ten or twelve inches of water. The hip bath, when used, must be of the same temperature; the warm fomentation must be constantly applied to the joint. I omitted to mention that during the general treatment of gout, the warm fomentation is, in the majority of cases, worn on the abdomen. This gentleman told me that during an attack of gout, while being rubbed for thirty-five minutes in the *shallow chilled bath*, according to order, while under an attack, his feeling of healthy appetite came on so intensely, that he entreated for a piece of dry bread, and could hardly hold out with patience to the end of the process from hunger. This shews clearly how this bath relieves morbid action, and how salutary it is.

I shall add another case or two. Mr. D——, director general of the schools at Hamburgh, a grandfather, a most intelligent, amiable man, told me the following:—“ I have been here nine months; during the last ten years I have been nearly deprived of exercise, by being almost always under an attack of gout. The state of my general health you may suppose from this. Since I have been under this water treatment, *I have not been confined one day to the house*, and you see I mount the hills as gaily as the best of you young ones. Some time ago I was attacked at table with giddiness (from gormandizing!) and every symptom of approaching apoplexy. I was immediately led to my room, where for a time I was insensible; when my senses returned, I found myself being rubbed in the “ shallow bath,” and by and by

discovered that Priessnitz was at my side ; I was rubbed for three-quarters of an hour, when I was quite relieved. It was, in fact, an apoplectic stroke, which I firmly believe would have been fatal with any other treatment. I was as well as ever the next day. I am so satisfied with the progress I have already made, that I shall remain here this winter." I shall give two more cases—one to shew the after effects of the " water cure," the other the advanced age at which it may be used with safety. One day, dining with the Princess S——, the gentleman at my side, Count ——, looked so robust and hearty, that I asked him what *he* was doing at the " water cure?" He replied, " Oh ! I was cured seven years ago here of gout, and I have only returned to *embrace* my old friend Priessnitz, and see how matters are going on." The other case is that of the Prussian Field-Marshal Tichtell, who, in his *eighty-fourth year* was at Graefenberg, going through all the process of " the cure" for gout. I used to walk about with him very frequently ; he told me it was his third visit, having never been able to remain but a very short time. He added, " I wish I had known of this sooner, for I shall never forget what I suffered from gout during a campaign. *By the greatest care in diet*, and indeed in everything, and avoiding all remedies, I have been preserved to tell the tale."

Any one going to Graefenberg will see dozens of cases on which to make their observations.

## RHEUMATIC FEVER.

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THIS is a very painful affection; it is produced by remaining in damp clothes, cooling too rapidly after profuse perspiration, sleeping or sitting too long on new made hay, or on the grass, &c.; but even these causes seldom or *never* excite the disease in healthy or temperate individuals. Those who are the subjects of it, have been generally preparing the way by irregular living,—depression, or over-working of the nervous system, drinking spirituous liquors, &c. The most terrible attacks I remember, were in persons who had drank much rum. Over-working the brain, depressing states of mind, in fact, anything that vitiates, or debilitates the constitutional powers, produces the disposition, or liability to be attacked. It is attended by a high degree of constitutional irritation; different joints become swelled and red, generally increasing towards night, and aggravated by the heat produced by the bed-clothes. Sometimes it will suddenly leave one part, and as quickly appear in another. The stomach and alimentary canal are always, more or less, affected; there is a tendency to perspiration. There is always



danger of the heart becoming attacked. The largest heart I ever saw, was in a master baker, who died of cholera, shortly after recovering from acute rheumatic gout; it was incredibly enormous, nearly as large as a boy's head at ten years of age. He had been salivated for this attack, till a large piece of the back part of the jaw came away; and large pieces were still exfoliating when the cholera mercifully put an end to his sufferings. His poor wife was salivated too, by not rubbing in the mercury with sufficient care. The treatment by water has been very successful in this, as well as in all other fevers. The great object is to allay irritation and fever, and produce copious perspiration; but while the symptoms are running high, it is better at first to apply the "wet sheet," and if perspiration comes on easily in it, to let it go on; if not, and the sheet becomes quickly heated, and dry, it must be changed frequently, till this state is removed. This should be followed by a good washing, and rubbing in a bath containing little more than half a foot of water, from  $65^{\circ}$  to  $85^{\circ}$  Fahrenheit, according to the strength of the patient. The patient should remain in it ten, twenty, or thirty minutes, or till he is well cooled and refreshed—sufficient rest being given after this. If there is little fever, copious sweating may be brought on, without any danger of aggravating the symptoms. The wet bandages should be kept constantly applied to the joints affected—renewing them every quarter or half hour. By pursuing this system steadily, a few days, sometimes less, remove

all the urgent symptoms. When recovery is taking place, the patient should go through the sweating process, or wet sheet and bath, at least once a-day. A chilled hip-bath must also be taken once or twice a-day. Cold water must be taken in large quantities, half a tumbler at a time. In most cases of rheumatic fever, the wet sheet should at first extend only from the arm-pits to a few inches below the knees, thus leaving the arms and feet out. While in the bath the patient must be well *rubbed*, particularly the painful parts; and when he comes out, the wet and dry coverings must be again immediately applied.

## CHRONIC RHEUMATISM.

This diseased state is seldom found alone, there is always more or less suffering in some of the internal organs. The external pains, swelling, and stiffness of the joints, the too great quantity of "joint oil" making them puffy, and the dropsical state that often accompanies, produce a general as well as a local disturbance, as well as being kept up by general derangement. It may be divided into three kinds:—in the *first*, there is more irritation and fever; the pains do not remain in the same place, and are increased by the heat of the bed; the *second*, may be characterized by its making the patient a good weather-guide; he can tell when it is

going to rain, &c., which, though useful in one sense, is very disagreeable in another; and such delicate powers of perception had better be got rid of as soon as possible; increased warmth does not aggravate the symptoms, but rather seems to lessen them. In the *last kind*, the structure of the joints is changed in its nature, and thickened, giving them a deformed appearance; in all these states there is great danger of the heart becoming affected; it is the complication most seriously to be dreaded, for modern pathologists have discovered that it very frequently takes place. The tendency to this distressing state is often brought on, and greatly aggravated, by an irregular and stimulating mode of living, as well as by everything that weakens the powers of the skin, and destroys the equilibrium of the internal machinery. The poisoning effects of mercury performs its full share in producing, and predisposing to this state, assisting the action of cold and moisture.

*Lumbago* and *sciatica* follow in its train, and are sometimes mistaken for other complaints having similar symptoms. When rheumatism attacks the covering of the ribs, it is sometimes mistaken for pleurisy.

TREATMENT.—Gout and rheumatism were amongst the first complaints that Priesnitz treated in great numbers, and was most successful in. They are still to be seen at Graefenberg, at all ages, and in all their varieties.



The treatment varies according to the state of the patient, and the complication of the rheumatism with other complaints. When the patient is fit for it, he goes through the sweating process, night and morning, followed by the cold or chilled bath, a hip, or sitz bath at eleven o'clock in the morning, sometimes the douche. The parts affected are kept enveloped in the warm fomentation; and it is sometimes found very useful to have them well rubbed for ten minutes, or a quarter of an hour, with the hand, constantly dipt in cold water.

The wet sheet in the morning instead of the sweating is, in a great many cases, found to answer better; in others, again, a mixed treatment is found preferable. When the douche is taken, it is better, as a general rule, to avoid the part affected, for it often fixes the pain, and increases the irritation. But when it is slight, and the patient in tolerable health, it removes the pain at once. Priessnitz, as I have said, is against the use of flannel, and will make no exceptions. I think he is wrong. There are many cases of rheumatism where I should order its use till the cure was far advanced.

## SCROFULA.

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I SHALL give a mere outline of what we call scrofula, reserving the subject in all its pathological details for another work of a more purely medical character. In all parts of Germany, where it is to be met with at every turn, in one or other of its numberless forms, it is called *the English disease*—supposed by the many to have had its origin, or being more prevalent in the British Isles. This notion no doubt arose from its having been cured by the royal touch; immense numbers going to London to be touched by royalty. Very many were cured, or had their diseased states much mitigated by the powerful effects of hope and faith, united to the journey, and the *absence* for a time from an unhealthy situation, and other causes.

This diseased state is *transmitted from the parent to the child*. It has its origin in the want of light and heat, in humidity, aliment of a poor or unhealthy description, or want of exercise in a clear atmosphere; for exercise taken where the air is humid and the situation obscure, is very different to that taken where the position is elevated, and the air equable, dry, and bracing.

The first effect on a child (for it is at a tender age that this disease generally commences) of the causes I have enumerated, is, a languid state of the vital powers, the nutritive matter is vitiated, and the powers of assimilation imperfect. From this arises an excess and want of coherence in the white tissues; the bones are not sufficiently solid; there is excessive irritability of the absorbent system; the nervous system is too much developed, more particularly in the great centres, and there is great sensibility to impressions on the nervous system, and in the vessels circulating the white fluids.

This state constitutes the scrofulous diathesis.

The external signs of this temperament are more particularly observed in the form and colouring. The subjects of it have generally a rounded form, narrow chest, large head, a fine smooth skin, in which the blood-vessels are easily seen, light and soft hair, large blue eyes, the upper lip and nostril more puffed than natural, a clear blonde complexion, except on the cheeks and lips, where it is of a brilliant red, the flesh soft compared with other children, but there are cases where great paleness prevails. However, all these evident signs are not indispensable to constitute scrofula; it may be met with in robust constitutions, with an opposite complexion. This state, by being transmitted from generation to generation, changes the nature of the whole constitution, and produces great degeneration from the healthy and natural type. Children constituted in the manner I have described, being acted upon by an unhealthy mode



of living, by the alternate actions of cold, heat, and damp, become the subjects of all the varieties of scrofulous disease. The lips become more swelled, the eyes, nose, ears, and face become engorged, attended with more or less heat in the parts; an unhealthy mucus is secreted from the nostrils; inflammation of the eyes of an obstinate character takes place; the gums become red, spongy, and easily made to bleed; the hands and feet, from slight effects of cold, become swelled, of a bluish red, and subject to chilblains; the glands of the neck enlarged, sometimes the ears are in the same state; an injury done to the extremities by a blow or fall causes swelling, with heat and pain, producing a kind of inflammation which remains permanent. Sometimes the simple action of cold is sufficient to cause a swelling of the elbows, knees, or feet; the skin becomes livid, slight painful ulcerations take place, with discharges of unhealthy matter, and the heads of the bones become affected. These states are generally observable in childhood and to the age of puberty, and sometimes continued beyond. I have only thus far described its external action; but the internal organs are not exempt. The digestive organs become affected; the mesenteric glands become enlarged, and are easily felt like a mass of knots, by pressing the abdomen; the extremities shrink; a cough, with great expectoration, comes on, with great danger of further mischief in the chest. These symptoms sometimes diminish and disappear as the individual approaches years of maturity. Grown-up persons of

apparently good constitution, but still having the predisposition, by excessive depression of spirits, long confinement, with a bad diet, in an unhealthy prison, are attacked by it, often with great rapidity. When this scrofulous state goes on without being relieved, extensive suppuration and discharges of a bad and characteristic quality become formed; when external disorganizations and formations of various kinds are effected, it attacks the internal organs, and the patients sink under chronic inflammation of the abdominal apparatus, or of the viscera of the chest. As in many other diseases, medicinal treatment has been found very ineffectual. Iodine has been found to do more harm than good, and is a dangerous remedy; the great reliance has been placed on change of air, diet, and bathing. From what I have seen of the "water cure," it has been very successful in the *treatment of scrofula*. The elevated position in which these establishments are formed, the pure air constantly inhaled, regular exercise, the tonic effect of a scientific system of bathing, the increased powers of digestion, forming new and healthy nutritive matter in large quantities, do wonders. But, independently of all these powerful hygienic means, pure water, applied externally, and absorbed in large quantities internally, has an effect purely its own, which cannot in the present state of our knowledge, and, I believe, never can, be fully explained; nor is it necessary. We can study the effects of gravitation, without knowing what gravitation is. We can observe the varied phenomena

of sensibility, and the different sympathies of the human body, without ever knowing what they are.

The treatment of scrofula by water embraces the whole of what is yet known of the modes of its application ; no two cases can be treated alike. The age and relative strength of the patients, the complications, and the extent of the ravages which the disease has caused, are the only guides ; everything depends upon the tact and discrimination of the practitioner, and his knowledge of the disease and the remedy. There were a number of children under treatment at Graefenberg when I was there, and one grown-up person—a young lady from Hamburg. She left before me, perfectly cured ; she was very handsome, and the belle of our small community ; she had been about twelve months under treatment, and commenced it with all the external characteristics of scrofula, which she had had from infancy ; her general health was also much impaired, attended with considerable suffering. For the first few months there was no evident change, except in the general health, which had become perfect. At this time the feet and legs began to swell, soon succeeded by copious discharges from the feet ; this continued for three months, when it ceased, leaving her in the state I have described, without mark or external swelling. During the time that this crisis went on in the extremities, the warm fomentation was kept continually applied, wearing large over-all boots, taking her daily exercise with her accustomed facility. The general treatment consisted



in the sweating process, wet sheet, cold and chilled baths, hip bath, foot bath, compresses, and douche, and the plentiful drinking of cold water. In spinal complaints proceeding more or less from this cause, the water cure is equally efficacious. There were several cases that I noted with great interest, which made very rapid progress. Priessnitz allows no back-boards or instruments of any kind. When the water cure becomes more studied, of course it will soon be discovered what can be made valuable adjuncts, and what not.

## DISEASES OF THE CHEST.

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TUBERCULAR CONSUMPTION — BRONCHITIS — ASTHMA —  
HOOPING COUGH—AFFECTIONS OF THE HEART.

IN this work I shall confine myself, in treating of each of these diseased states, to a few introductory remarks, directing the attention of the reader more particularly to the treatment. I have seen all the diseases above-mentioned, except tubercular consumption, cured by the treatment under discussion. I shall begin with tubercular consumption. Priessnitz, when he has reason to suppose that this disease is formed, and the symptoms are unequivocal, refuses to submit the patient to the "water cure." But numbers can be seen at Graefenberg who have all the outward signs—such as rapid loss of flesh, incessant cough, and spitting of blood. There was one case of a man thirty-five years old, whom I examined very attentively; he had decidedly a deposit of tubercles, and a small cavity already formed; he remained about four months, and left without any apparent change having taken place, and the symptoms undiminished. Priessnitz called the spitting of blood,

a transfer of hæmorrhoids. When consumption is advanced, the water cure is only a palliative; but in very young subjects, where there is every predisposition, and even where some destruction of the lung has taken place, this method, judiciously applied, will, in the majority of cases, place the individual in safety. When the individual is past seventeen or eighteen, I have no *grounds* for holding out any hope. The following case I consider of the highest interest, and I shall present it to the reader with all its details. Soon after my arrival at Graefenberg, I was introduced to the Princess S——a, at her request; all her family were under the treatment, including herself and sister. This lady had lost four children with affections of the brain and stomach, after having consulted all the first men in Europe, and was without hope of eventually saving two of the survivors, a girl and a boy. The four who had died, had been carried off at different ages, from two to seven years, by convulsions and vomiting, which nothing would arrest. The most violent and energetic means were had recourse to. The last, of the age of seven, vomited for fourteen days before the fatal termination. Hearing from some of her neighbours of the “miraculous cures” they had made at Graefenberg, she determined to go and consult Priessnitz. The little girl, six years old, had incessant cough, which had been gradually increasing for three years; she expectorated large quantities of thick yellow sputa, frequently mixed with blood; she had hectic fever, and was reduced to skin and bone. This state



was complicated with an affection of the brain, and a tendency to convulsions; her physicians declared the case to be one of consumption, and that the child could not last longer than six months. Eighteen months before this she had had an attack of convulsions; blisters were applied, from the nape of the neck to the loins, and the child was confined for six months to her bed. Priessnitz said there were still hopes, and that it was "scrofula fallen on the chest." During the first six months' treatment by the "water cure," the child gained flesh and appetite, the fever ceased, but the cough and spitting, mixed with blood, were undiminished. The family physician, who had accompanied them to Graefenberg, was still against proceeding with the "water cure," saying it was utterly useless. When the mother asked what then he would propose, he said, "an issue in the arm." "Oh!" she replied, "thank you; you have applied that once, and the child was laid up for several months, and narrowly escaped with the erysipelas it brought on." These contending opinions, however, had such an effect upon her own health, that she had frequent fainting fits. In this state of things, hearing there was an English practitioner at G——, she desired to consult me; on examining the child's chest, I found the whole of the right side very dull on percussion. On placing the ear, there was a strong bronchial râle throughout; under the right collar-bone, there was a small cavity, and the gargouillement was distinct. I gave the following opinion at once, in these words:

“You have no chance, except by the ‘water cure,’ and I am happy to say that I agree with Priessnitz in thinking there is a chance; the child is daily gaining flesh, and the great point is to keep up the nutritive powers, keep off fever, and relieve irritation in the chest as much as possible.” I added, “If it was my child, I should send it from the low situation here in the town, up to Graefenberg, now that the summer is coming on.”

Priessnitz was consulted, and as he had nothing to say against it, the child was sent up. Her progress during the summer was very rapid; she became quite fat, with a ruddy complexion; but the coughing and spitting, though considerably diminished, still continued, and still mixed with blood. About a week or ten days after I had first seen the child, I took Doctor Coq, an intelligent, and one of the leading physicians of Ghent, (who was going through the cure,) to see it; his opinion and advice were similar to my own. Towards the end of October, the mother returned, after a temporary absence, and when I told her I was on the eve of departure for Nice, she asked me if I did not think it would be a good change for the child, as during the severity of the winter, the child was lethargic, and frequently could not go out; and that she spent much of her own time (having also an affection of the chest) by the heated stove, and that all the physicians she had ever spoken to, had advised her to go to Nice. I replied, “I had no doubt, if the child *pursued the same treatment*, much could be gained, as the great desideratum was, that the

child should be always out in the air." Priessnitz was consulted, and as he had a suspicion it was a judicious measure, he did not oppose it. The child was then placed under my care for the winter, and she removed with her family to Nice. The result was, the child went on gaining flesh, sleeping the whole night for nights together, without coughing, the chest becoming every week clearer, and *I now see nothing to prevent a perfect recovery.*

The treatment has been as follows:—Every morning, at about six o'clock, she is placed sitting in a bath, containing about nine inches of water, at a temperature of about 65° of Fahrenheit; in this she is well rubbed all over during a period of fifteen or twenty minutes; she is then dressed, and goes out to walk for an hour, drinking several tumblers of cold water during the exercise. The bath is repeated every night, an hour or two before bed-time, the same as in the morning. When taken out of the bath, a double piece of linen steeped in cold water, and well wrung out, is placed on the chest, covering the front part, and reaching from the collar bones to the pit of the stomach. This is completely protected from the air by a similar covering of dry linen; it is worn night and day, and changed at noon for a fresh one. When the cough was violent at night, and it sometimes lasted for hours, the application of a *fresh* wet compress was found (when the idea of trying it first struck me) always to relieve it. I should not omit to mention that soon after going to Priessnitz, she was attacked with a violent



convulsion, ending in a stiffened state of the whole body, and complete insensibility. When this occurred, Priessnitz happened fortunately to be in the town; he put her at once into a "shallow chilled bath," where she was rubbed for three-quarters of an hour, before she shewed any signs of consciousness or of life. During this period, she was taken out three times for a few minutes, placed on a bed, and rubbed with wet hands. When this state is coming on, there is great dilatation of the pupils, and it has since been prevented going any further by "head baths," which she has taken every day since this attack. For the last five months the head has been perfectly free, but the head baths are still continued once a day at noon. I may mention, *en passant*, the state of her brother. He has had a strong disposition to the complaint of which his brothers and sisters have died. It comes on in the following way:—the face becomes suddenly deadly pale, the features shrinking, the eyes more or less fixed, the pupils dilated to their fullest extent, and vomiting begins. In from five to ten minutes, by the cold hip bath, these symptoms are completely removed, and in half an hour he is out playing as well as ever. In the first bad attack, before going to Priessnitz, he was treated in the following way:—blisters were placed on the stomach and all along the back-bone, and the raw surface dressed with a preparation of opium, and calomel and opium in large quantities given internally. This was a seven months' business in bed and in his room. He is now past twelve years of age, and his teeth are all completely

destroyed by the mercury. When he went to Graefenberg, his eyes were so much affected, that there were great fears he would become completely blind ; for this he went through the water cure, and now sees perfectly well. He has continued the treatment at Nice, in a gentle manner, and though still a delicate boy, is in perfect health. The diet in both these cases is cold milk, with bread, morning and night, and a simple dinner of meat, vegetables, and light pudding, and water alone as their beverage.\*

It must be noted that in convulsive states purely nervous, like some kinds of epilepsy, as a general rule the patient must not be put in water. The treatment must be confined to rubbing the extremities with the hand dipped in water, sprinkling the face. When the attack is over, the head bath and foot bath may be taken, and other means for preventing a relapse. During an epileptic fit, the patient must on no account be put in a bath ; it only makes it worse, and last longer.

I will not lose this opportunity of saying a word about the climate of Nice, and which will apply equally to every part of Italy, of which I have had considerable

\* I received a letter a few days ago from the Princess, which gave me great pleasure, and confirms my prognosis. Relative to her daughter she says—" Je profite de cette occasion pour vous dire que Sophie va de mieux en mieux ; elle tousse moins tous les jours, et ses nuits sont excellent. J'aime à vous dire, Monsieur, que vous êtes pour beaucoup dans cette amelioration, et je vous en remercie de tout mon cœur. Je joins en mille compliments pour Madame Wilson, et pour vous l'assurance de mes sentiments distingués.

" S—A."

means of judging. Nice is one of the *worst climates* that any one having a bilious or dyspeptic tendency can be sent to; they generally *become worse, with very few exceptions*. In diseases of the chest, when past the age of puberty, and in most cases with the ordinary modes of living and treatment, it is also very prejudicial. After the end of February it is very bad indeed. No *invalid* in search of health should remain in the town or the lower parts; he has only to try the hills for one day or a week, to perceive the great contrast in the salubrity of the air. There are very few English people who, if they persist in taking much wine and a full diet, can stand the climate of Nice or any part of Italy, for any length of time, without suffering. This error is of common occurrence.

### ASTHMA.

I have frequently jumped into the swimming bath at Graefenberg at the same time with asthmatic patients, when the spasm and difficulty of breathing were at their height. It always acted in these cases as an immediate relief, the fit being over before they could get out of the bath; but it requires some caution, as it would not be judicious in all cases. The general treatment for this disease varies according to the constitution and powers of the individual, and any complication from which he may be suffering at the time. I witnessed the complete recovery of five cases of long standing.



## HOOPING COUGH.

I saw but one case of this, but have heard of a great many where the greatest relief was obtained by the "water cure." In this complaint also, the treatment must vary according to the age and strength of the patient, &c.

I shall illustrate the general treatment by the following case:—A gentleman who had been a long time at Graefenberg, took me to see the child of his tailor in the town below. A short time before, he had called there, and heard the child hooping violently; it was very much reduced, and evidently very ill. He asked the parents what they were doing for it? They said the surgeon of the town was attending, and giving it an infusion of heartsease. He entreated them to send for Priessnitz, and as they hesitated, he advised them to try the warm compress to the chest and stomach. This relieved the child so much, that they requested Priessnitz to call. He ordered a hip bath morning and evening, with the chill barely taken off the water, and to remain in it twenty minutes, a sweating and wet sheet the alternate mornings, followed by a bath at sixty-five degrees Fahrenheit for five minutes, a wet compress well protected, to be worn between the shoulders, the same on the abdomen, to drink plentifully of water, which had been some time in the house, that it might not be too cold,

and to have as much fresh air as possible. The paroxysms daily decreased in intensity, and in a fortnight they had quite ceased. A gentle treatment was continued for some weeks afterwards, and the child became robust, and regained its flesh.

### CROUP.

This disease, notwithstanding all the leeching, blistering, calomel, and emetics, is often fatal to children. It is very easily cured by water. As soon as any affection of the windpipe, or the peculiar crowing cough, characteristic of this disease, is perceived, the patient should be enveloped in the "wet sheet," the feet and ankles being left out. If there is much fever, and the sheet becomes hot within five or ten minutes, it must, at the expiration of fifteen minutes, be changed for another; and so on, according to the intensity and duration of the heat. When this has ceased, the child must be transferred to a bath or tub, containing seven or eight inches of water, not quite cold, in which it must be rubbed for five, ten, twenty, or forty minutes, according to circumstances; it may then be put to bed, or held on the knee, having previously placed the warm, wet compress on the neck and chest. As soon as all fever and irritation are reduced, the child should be put through the sweating process, wearing the compresses while in

the blanket, and this of course followed by a general washing in chilled water for a few minutes. By this simple means all danger is put out of the question, and the disease quickly subdued.

## AFFECTIONS OF THE HEART.

The heart sympathizes with all the organs, and, in fact, with every part of the body; but it is particularly under the influence of the brain and stomach—a thought will suspend its action or make it beat with violence; by putting wine or spirits, too much food, tartar emetic, opium, or any other medicinal poison, in the stomach, the heart immediately feels the effects. I have already mentioned how it is affected by gout, and particularly by rheumatism. Many persons are supposed to have disease of the heart, and are treated for it, when, in fact, it is only sympathizing with diseased action in some other part of the body; but it often happens, after it has been tormented in this way for a longer or shorter time, that it becomes changed in its structure, getting too large or too small, too thick or too thin, too hard or too soft; the valves also become injured in different ways. When it is not much diseased, and the palpitations &c. are in a great measure sympathetic, the morbid symptoms quickly give way under a judicious general treatment by the



“water cure ;” even when evidently enlarged &c., I have seen all the symptoms of this state removed as the general health improved, nothing shewing its existence even by the pulse or breathing, or by violent exertion and walking, or running up steep ascents.

## MADNESS AND INSANITY.

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THIS subject is of too great importance to treat in the cursory manner I have allowed myself in the preliminary observations to the treatment of other diseases ; but as the two following cases are of great interest, the mode of treatment cannot be too quickly known ; I shall therefore present them without further comment.

### CASE OF MADNESS.

This is a specimen of one of those formidable cases in which Priessnitz, though making so light of them, shews his genius, tact, and knowledge of the power of water. Soon after going to Graefenberg, I was fortunate enough to witness the following :—

A gentleman arrived soon after me, with all the characteristics of intense melancholy and hypochondriasis : I made his acquaintance at once. I found that he had been occupied all his life, and subjected to much confinement, in a government bureau ; he was upwards of six

feet in height, and large in proportion, but with a weak, tremulous voice, almost approaching to childish treble. It seems that he had been in a state of melancholy for many years, and suffering greatly from his digestive organs; two months before his arrival at Graefenberg he had lost his wife and two children in one week. He had great fear of water, and was put upon the most gentle course of treatment; he often would say to me, "My thoughts are so horrible, I think I shall go mad." One day, while we were at dinner, Priessnitz was called out of the room, and I soon heard that the "Commissioner" was mad. I followed, and found him in a shallow tepid bath, kept down and rubbed by half a dozen strong bath servants. He inhabited a large room like the ward of a hospital, where fourteen gentlemen lived together, having their beds merely separated by a slight screen; those who feel the want of society and have a disposition to melancholy prefer this, and it is made for such. It appears that just before dinner, one of the servants saw there was something more than usual the matter with him; by-and-bye his state became evident, he went raving mad; he attempted to throw himself out of the window, and was only prevented by two strong servants. His legs and feet were placed in water and well rubbed, while Priessnitz was sent for, who, on his arrival, ordered him into the bath; at first, the water was chilled, but as the symptoms did not decrease, cold water was gradually added, hour after hour, till it became quite cold; at intervals a tumbler of water was poured over the head, and



finding that it still kept up its heat, a decanter of cold spring water was emptied quietly on the head every quarter of an hour or thirty minutes. During the first four hours he made repeated efforts to get out of the bath, muttering continually some unintelligible sentences. Now and then the *arm pits were felt*, to discover whether they were reduced in temperature with the rest of the body. Priessnitz, who was calmness personified, thought it a bad case, from the length of time that this state of things had been in preparation; he asked me very quietly what medical men did in such cases, and how they terminated. I told him we bled, leeches, blistered, &c. &c., and that the patient very often ended his days in an asylum; he gave a look which expressed that he was satisfied. After the man had been nine hours in the bath, the symptoms gradually decreasing, he fell asleep. Priessnitz happened to come in just at this time, and said, "That will do, let him rest twenty minutes longer." At the end of this time he was put to bed. I visited him next morning at six o'clock, he was quite calm, had slept well, and *had no recollection of anything that had occurred*, complaining only of feeling tired. At eight o'clock he ate his breakfast of bread and milk as usual; he remained in bed during the day, and had two or three "wet sheets." Falling into a perspiration, he was, after it had continued two hours, put in the "shallow chilled bath," and washed for seven or eight minutes. The next day he was able to walk about; a profuse eruption of small pustules coming out all over

the body: Priessnitz had predicted this when he had been about an hour in the bath. He remained about two months longer at Graefenberg, when he was obliged to leave; he was somewhat better, but to have made a perfect cure many months longer would have been necessary. A complication of diseased states, which for so many years have been rooting themselves in the different organs, cannot be repaired or thrown off in so short a time as people could wish,—a simple cut will not heal in twenty-four hours. I observed that the water in the bath in which he remained so long, became, after a time, perfectly turbid, like muddy water, being a secretion from the skin; this is always the case. During the whole of the scene I have described there were never less than from twenty to forty persons present.

### CASE OF MADNESS.

There was another interesting case of madness which I shall relate—important, as differing in its nature and mode of treatment from the one I have already given. A gentleman, a little past thirty, made my acquaintance soon after my arrival at Graefenberg, because, as he said, I was an Englishman; he was at Graefenberg to be cured of a tendency to fits of insanity. We became great friends—he always met me with a passage from one of Byron's poems.—“I rove the young Highlander o'er

the dark heath." He would often repeat, "Do you like Byron?" When I answered, he was a Prince of Poets, he would say, "You're a gentleman.—Is not Preissnitz the greatest man that ever lived? and the 'Water Cure' an inspiration from Heaven?" When I replied, that I made no doubt when it became generally known, and when people lived with moderate temperance, there would be an end to chronic disease—there would be no more diseases of the heart, brain, or stomach—he would catch me up in a bruin-like embrace, and almost squeeze the breath out of me, crying—"I rove the young Highlander." He would add—"But wont the doctors in England, when you go back, kill you?" "No," I replied; "they only kill some of those who take their poisonous drugs, and with the most innocent intentions. I shall never again take a grain of medicine of any kind, so I am safe; but they are not such desperate people as you imagine, for they do not even interfere to protect the public from notorious quacks and impostors, who kill wholesale, and *not* 'with the best intentions.'" "Ah!" says he, "perhaps that is because those terrible persons you name make work for them in the end." I said, that was rather an uncharitable construction. I could always find him within a quarter of a mile, by his singing his pass-word. When walking among the pine trees I am sure he fancied himself in the—

"Land of brown heath and shaggy wood,  
Land of the mountain and the flood."



He was going on very satisfactorily, when he went roaming, with some other wild fellows, to the frontier garrison town of Neisse, where he committed some excesses. On his return, fever came on, and being told that he was ill, I went to see him. I found him im-packed in the "wet sheet," quite mad, screaming out a splendid *mélange* of the most brilliant passages of Byron, Goëthe, and Schiller. The "wet sheet" was changed and applied above thirty times during the day; he was three times rubbed in the "shallow chilled bath," for about thirty-five minutes each time. The next day it was all over. I found him again reduced to a temperate, and very piano—"I rove the young Highlander," and seriously repenting the culpable tricks he had played with himself at Neisse. When not under the influence of the attack, he was quite sane, only a little too enthusiastic about poetry and music.

## TETANUS AND LOCKED JAW.

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THIS fatal disease may be brought on by distinct causes, when there is a predisposition—by the body being in a nervous state, or the fluids and solids altered by bad living, over work, or anxiety. It takes place very frequently from a slight local injury healing badly, and forming a hard or morbid cicatrix. I have already observed, that when local injuries are cured with water, this never can or will occur. It is also produced by the action of cold. The last case I was called in to in London, some five years ago, was caused by cold acting on a patient under the influence of mercury. It came on slowly, with locked jaw. I sent for one of the talented surgeons of the London Hospital; we applied blisters, gave calomel and opium, &c., but the poor patient died in a terrible state. This diseased state is divided into acute and chronic, according as it is mild or severe. When it is confined to the muscles of the jaw and throat, it is called locked jaw; and when it goes further, different names, by way of distinction, are given, according to the part most affected. Thus it is called opisthotonos when the muscles of the back bend it

backwards till it forms a bow, nearly making the head and heels approach. This state comes on gradually, becoming worse and worse, till it reaches the severest state. At first there is a sensation of stiffness about the neck, which increases by degrees till it is with difficulty the head can be moved, accompanied by stiffness about the root of the tongue, and difficulty of swallowing. This goes on till the mouth cannot be opened, and the patient refuses to attempt to swallow. There is great pain and pressure at the pit of the stomach, which precedes, and is soon accompanied by, violent spasms of the neck, and upper part of the body. When it is further advanced, the eyes are fixed in the sockets, and the whole countenance is frightfully changed. The abdomen is hard and tense, and the whole body is affected with rigid spasm and stiffness. The sufferings are terrible beyond description; in the end the patient is released from his deplorable state by a violent convulsion. The fatal termination often occurs on the third or fourth day, seldom going beyond the eighth. All do not die of this complaint, but the majority do not recover. When the symptoms first present themselves, the patient should be put through the sweating process, followed by the shallow chilled bath, in which he should be well rubbed until he is quite cold. When reaction takes place, and the patient is sufficiently rested, say four or five hours, it should be repeated; in the interval the warm fomenting bandage should be applied to the abdomen, round the jaw, and along the spine. The hip-bath and foot-bath may also



be made to perform an important part. When there is much irritation, and other indications which I have already mentioned, the "wet sheet" should be used before the sweating is attempted, or the patient may sweat in the "wet sheet." In some cases the douche has been made a valuable adjunct, and might be in all. As much cold water must be taken internally, in small quantities at a time, as can be managed; and cold-water enemas administered every two or three hours. A judicious combination of these means has never yet been known to fail, even in the most forlorn and desperate cases.

Priessnitz' first case of this disease was a young clergyman. It was very many years ago, and he was puzzled, having never seen anything of the kind. The medical men of the town therefore attended him. After they declared that they could do nothing more, and that the case was utterly hopeless,—Priessnitz saying also that he saw no chance, an intelligent physician, Dr. Harder, of St. Petersburg, who had been some time at Gracfenberg, studying the effects of water, advised him to try what could be done. The patient was put in a cold bath, and rubbed for two hours by four men; the patient was then put to bed for two hours. The medical practitioners offered to bet Priessnitz all they were worth, that the patient would not recover. The latter refused to bet on such a subject. The patient was again placed in the bath, and the same process gone through. This mode of treatment was continued for twenty-four hours, and he was completely cured.

## HYDROPHOBIA.

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HITHERTO no remedy or mode of treatment has been found to save the patient when attacked with this dreadful malady. I regret that I did not speak to Priessnitz about it; but since I left Graefenberg, a gentleman told me, that he heard Priessnitz say that he was sure it could be cured, and I have no doubt from the effects I have witnessed in analogous states, that he has good grounds for his dictum; and I can only say that if ever I should be so unfortunate as to become the subject of the disease, I shall give express commands to be treated after the manner I shall presently describe, and, I think, with every rational hope of success.

Every means that ingenuity could invent have been already tried in vain; there is not one fair case on record where recovery has taken place. All kinds of supposed specifics—bitters, aromatics, and sudorifics, the most powerful narcotics, have been used without producing any effect, as well as bleeding and all other antiphlogistic measures. Mercury has been used externally and internally, till salivation has taken place. But, after all the hopes which this means at first excited,

it was found only to increase all the worst symptoms. Poison has been opposed to poison, and the bite of the snake was also fruitless. At last all hopes of saving the patient were concentrated in burning or cutting out the bitten part as soon as possible after the accident. Cupping-glasses, where the part admitted of the application, was also a judicious proposition.

Some supposed that this disease was the effect of the imagination, and that fear and despair brought on the complaint. However much they may add to the danger, this supposition is not founded on fact; for it has often taken place when the patient had forgotten he had been bitten, and found it difficult to point out the place. It generally occurs in hot weather. In about thirty, forty, or fifty days, sometimes later, the wound sometimes opens again, and the patient feels a sensation rising to the throat as of cold or of wind; he becomes languid and desponding, and by-and-bye a repugnance to swallow, more especially water, comes on; he is filled with the most fearful presentiments. The disease makes rapid progress, terror succeeds to despondency, the disinclination to drink becomes a horror of liquids, the throat and stomach feel in a burning heat, accompanied with violent spasms of the former, when an attempt is made to swallow. Shaking the curtains of the bed, opening or shutting the door, bring on violent convulsions. I shall not continue the description, suffice it to say, in two, three, or four days, the sufferings terminate.



TREATMENT.—When the bite has taken place, it is always better, under all circumstances, to cauterize or cut out the part; a wet bandage should immediately be applied, covered with a dry one, extending some distance about the part, changed at first every hour or two, and kept applied for some time after the wound is healed. If this dressing can be applied immediately, I should have no fear of infection, even without cutting, being an application having the power in a high degree of extracting all morbid matters, and being at the same time the best mode of healing the part, and never leaving after it a morbid cicatrix. When some time has elapsed without having had recourse to this dressing, and there is reason to fear that inoculation has taken place, the patient must go through the sweating process, followed by the bath; this can be done once or twice a-day, being a salutary process when well managed. I have every reason to argue that the poison would pass through, or cause a determination of all morbid action to the skin, if this process be continued till all cause for apprehension is passed; the douche and partial baths might also be made to act an important part. When nothing has been done, and the first symptoms of the disease are recognised, there is no time to be lost; I believe no preparatory treatment would now be judicious or availing, recourse must be had at once to the bath. I may mention that a patient with hydrophobia cannot express greater reluctance or dislike to entering the bath than with other complaints I have seen, which have ended

favourably. A *large* slipper bath will answer every purpose ; it should contain about a foot of water, at first at the temperature of sixty-five or seventy degrees of Fahrenheit, or higher if necessary. In this the patient is made to sit, two or three strong persons being employed in rubbing the back and lower extremities, with few intervals of rest, keeping the hands constantly wetted with the water, and passing them occasionally gently over the head and face ; if the patient does not become cold within the first half or three quarters of an hour, a gallon of cold water must be added, and so on, reducing the temperature every thirty or forty minutes. When shivering or chattering of the teeth comes on, the patient must on no account be taken out of the bath ; when this takes place, the process of rubbing must be increased till the patient remains calm and quiet in the water ; nor must he be taken out until the *arm-pits* feel as cold as the rest of the body. When the patient is quiet, and shews no desire to leave the bath, he should still remain twenty minutes or half an hour, to make surety doubly sure.

As the symptoms produced by the continued bath are in no two persons alike, the practitioner must be guided by the phenomena which present themselves during the treatment ; there are persons who get a sudden collapse, a tendency to faint, or become *hysterical* ; in such cases they must be taken out immediately, for a time, and laid upon a bed, and *rubbed all over*, particularly the extremities, with the hands still moistened with water. When these symptoms disappear, and reaction has taken place,

the original treatment must be renewed; there are cases where the wet sheet and hip bath might be highly useful in the interim. The after treatment will comprise all that is most applicable in the general treatment of the “water cure.”

This treatment I have described, and recommend, after much thought—*and I have not the slightest doubt but that it will be found successful.*





# APPENDIX.

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OBSERVATIONS OF PROFESSOR PELLETAN

ON THE

CALORIC CURRENTS.





## APPENDIX.

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I SHALL introduce a hasty translation of some observations of Doctor Pelletan, Professor of Physics to the faculty of medicine at Paris, which I think will be perused with great interest by many of my readers. He is the author of an excellent work, entitled “*Traité de Physique générale et médicale.*”

### OBSERVATIONS OF PROFESSOR PELLETAN.

The Memoir which I now re-produce was published in December, 1826, in the “*Medical Review.*” Probably at that time the medical world was not ripe for the observations which it contained; however this may be, it was taken little notice of, and at the present moment is little known.”

I beg to submit the following observations to the examination of my enlightened professional brethren :—

I have shewn, in the Memoir published in 1826, that the *organic activity was in proportion to the quantity of the currents of caloric which traversed the organs. That the rapidity of these currents can be increased by the subtraction of external caloric, as well as by an excess of its natural production, provided that in the first case, the internal powers be sufficient to supply the demand.*

There are a number of facts in the practice of medicine which prove, that restoring the organic action, weakened or suspended, is one of the most powerful means of curing disease.

Cold baths and affusions have been employed to awaken the general powers of the constitution; but they were only applied in a transitory and imperfect manner. Edwards has proved that *winter renders the animal economy more apt for the production of heat*; the daily application of artificial cold ought to produce the same effect.

A great number of facts obtained without any preconceived theory, shew that cold water has a curative action in the highest degree.

It is then but rational to believe that the curative effects of cold water are a powerful medical means, applicable to a great number of diseased states, and ought to be made known. I shall only add a word on the employment of the sweating process. It had already occupied a prominent place in our treatment, but it must be confessed we were deficient in the means of producing it at will, and, above all, without running some risk of doing more harm than good in the attempt.

The method of Priessnitz appears rational, curative, and safe. It only remains for me to repeat my memoir, with a few notes.

MEMOIR ON THE PHENOMENA OF HEAT WHICH  
ARE PRODUCED IN LIVING BEINGS.

It is an opinion, generally received and confirmed by all observations, that phenomena of heat, more or less evident, take place in all organized beings actually living, and this coincidence is sufficiently general, to have impressed on physiologists that caloric was the principal excitant of the organs, and the cause which produced and modified the execution of their functions.

If this be the case, the study of the phenomena



of heat in the organic system is interesting in the highest degree to the physiologist and the practitioner.

It may in fact be remarked, that much research has been directed to ascertain the proper temperature of living beings, and to assign the causes; these scientific researches have already been crowned with important results; but the physiologist studying the vital phenomena, has found but few and imperfect relations between these phenomena and the temperatures observed. A number of creatures with vital powers of great activity, possess but a very low temperature; the greater part, instead of having in reality any fixed temperature, have in fact only that by which they are surrounded, and have the power of supporting its change with so little inconvenience, that they merit the name of organized beings of variable temperature.

Warm-blooded animals, whose internal organs possess in general a more elevated temperature, more steady, and more indispensable to the sustaining of their existence, do not present the less the most marked discordance between the variations of their temperature and the state of their functions. One may remain unchanged, while the other may be raised to the highest degree of energy; and

while still considering caloric as the principal excitant of the organs, it must be acknowledged that the elevation of the temperature frequently produces a weakening of the functions, and even death, whilst a suitable application of cold excites and re-establishes the vital phenomena.

Even in medical practice, and by our therapeutical agents, we see with surprise the action by which we cool the vital organs produces the opposite effects of sedation or of stimulation; we may, it is true, explain this, by supposing that the organs react after the influence of cold, which is always at first sedative. But do we not find in this explanation traces of the vague hypothesis which unfortunately marks most of the physiological questions which as yet have not been sufficiently elucidated by the other sciences?

If it is true that the particular state, which is called temperature, has so little connexion with vital phenomena, it becomes important to remark, that this state ought not to be considered but as a functional result, which depends on the accidental proportion which may be established in each living individual between the loss and the acquisition of caloric of which he is susceptible, whilst the simultaneous existence of these acquisitions and losses

necessarily produce through the organs caloric currents more or less rapid; whence it may be concluded that the passage of caloric through the organs is here a primitive phenomena, and the temperature a secondary result.

It might be already concluded, from these isolated arguments, that it is important to study the caloric currents which are produced in the organs of living beings, and that the consideration of this should enter into all physiological and medical reasonings; but my object in this memoir is to develop this proposition, in proving, successively—1, that a given body may be the seat of currents of heat, more or less rapid, independently of the temperature in which it is placed; 2, that our organs are peculiarly sensible to the passage of caloric through their tissues; 3, that all organized beings are in the condition necessary to become the seat of caloric currents; 4, the vital phenomena and the energy of organic action appear to be in proportion to the rapidity of the caloric currents, rather than in proportion to the temperature; 5, that the adoption of these principles may serve to explain, in a satisfactory manner, a great number of the phenomena of vital heat, which, without them, could not be explained, and would be considered as anomalies.



SECT. I.—A GIVEN BODY MAY BE THE SEAT OF CURRENTS OF HEAT, MORE OR LESS RAPID, INDEPENDENTLY OF THE TEMPERATURE IN WHICH IT IS PLACED.

In fact, if we suppose a bar of iron, heated at one extremity, and cooled at the other, a thermometer placed in the centre will remain at a certain degree, which will depend on the difference between the temperatures of the two extremities, and of the conducting property of the body; but one may conceive, for a fixed temperature in the middle of the bar of iron, there will be an infinite number of different cases, provided that the cooling produced at the extremity of the bar be always in a given proportion with the elevation of the temperature at the other extremity; one may also understand that the current may become more rapid, and the mean temperature lowered, if the cooling is increased, and that, on the contrary, the current may become slower, and the mean temperature rise, if the cooling becomes less intense; from whence it results, that the rapidity of the caloric currents in the bar of iron is in no way indicated by the temperature of its central part, is not in proportion to

its temperature in this part, and even may be found in contradiction.

It is true that physicians have not as yet inquired what change the existence of a current of caloric, more or less rapid, may produce in unorganized matter; nevertheless, one may already remark:—1. That a galvanic current is produced in many cases where the conducting body is the seat of caloric currents. 2. That several metallic bodies, and some fusible substances, as phosphorus, become possessed of peculiar properties when they are cooled with rapidity. 3. In fine, that a number of organized bodies experience, during the increased movement of their liquid parts, many important changes, according as this movement is increased or diminished in rapidity.

The observations which have been made may be compared with what has been seen to take place in the study of electric phenomena. The electric phenomena with tension was soon understood, and that what is called temperature meant nothing more than the actual quantity of caloric in a body; the properties which pieces of metallic wire contract when electric currents were made to pass through them, was a later discovery; it is probable that valuable discoveries may be made by studying the

properties of bodies which are actually the seat of caloric currents, more or less considerable. However this may be, the existence of these currents are indubitable, and the time will not be thrown away in studying, on the same system, the phenomena of vital heat.

SECT. II.—OUR ORGANS ARE PARTICULARLY SENSIBLE  
TO THE PASSAGE OF CALORIC THROUGH THEIR  
TISSUES.

It may be added, this passage is the only admissible cause of the sensations of heat or cold which our organs afford: in fact, the impression produced in the hand by a liquid in which it may be plunged, is no way in proportion to the existing temperature of the liquid; it depends solely on the difference which exists between this temperature and that of the hand on which the experiment is made. The same liquid at the same temperature appears at one time warm, at another cold, according as the hand is warm or cold, so that the sensation of warmth is produced on the skin by a caloric current which enters, and the sensation of cold by the same current being in contrary direction: and, moreover, when the liquid is of the same temperature with the



external surface of the skin, no sensation either of heat or cold will be felt.

In reasoning on phenomena which are not accessible to our senses—from comparison with others which are of more easy investigation—we may conclude that the internal organs, which do not under ordinary circumstances transmit sensations, are powerfully acted upon by the passage of caloric across their tissues.

SECT. III.—ALL ORGANIZED BEINGS ARE IN THE NECESSARY CONDITION TO BE CONTINUALLY THE SEAT OF CALORIC CURRENTS.

This proposition requires for its elucidation, that we explain first what are the necessary conditions for the existence of a current of heat through a substance. It is clear that it may be reduced to three: 1. A source of caloric; 2. A means of throwing off caloric; 3. A means of conduction, or a conducting property in the substance in question.

As regards the source of caloric we may observe, that it may be of two distinct kinds; that there may be a local production of caloric as the result of special phenomena, as in animals that breathe; or that the object may be in constant communication

with a common source, which affords it a continued supply of caloric, as takes place in the vegetable creation on the surface of the globe.

As to the means of communication, they may be of two kinds ; by contact with cold objects, or by the change which takes place in liquids during their transformation into vapour.

As far as regards the conducting property, it is rare and imperfect in solid bodies, being confined to metals, which possess it to a certain degree, and being nearly wanting in liquids and gas ; but caloric may be transported with great rapidity from one place to another, by the mobility and the displacement of the liquid molecules, in consequence of which this means of communication is much more powerful and rapid than the conducting property of solid bodies. After having laid down these principles, we will examine, in succession, the great divisions of organized beings, to ascertain if, in fact, all present, without exception, the conditions necessary for the existence of currents of caloric.

Vegetables exist with their roots implanted deep in the earth, or in a liquid, both of which can furnish them with an unlimited quantity of caloric ; an uninterrupted circulation, more or less active, supplies them continually with fluids at the temperature

of the earth in which they are placed ; the contact of the air, cold under certain circumstances, besides the great evaporation which takes place above, are causes of the production of cold, which determines the existence of currents in their interior parts ; but if the ascending fluids arrive at a higher temperature than in the interior of the plant, the descending fluids have become cooled, so that there is not an organic layer in the whole tissue of a similar vegetable production which is not found situated between fluids of different temperatures, and in consequence becoming the seat of caloric currents.

The animals which exist in water may be divided into fish, and those which are called cetaceous. The former have appeared to most observers to possess the same temperature as the water in which they exist, which seems to exclude the idea that caloric currents traversed their organs.

Nevertheless, it may be remarked that it is extremely difficult to determine exactly the fact of a slight difference of temperature between that of a fish and the element which it inhabits. Davy found the temperature of some fish some degrees higher than that of the sea ; and fish have the faculty of resisting the cooling of the liquid in which they are placed to a certain point, and being endowed with



respiratory organs they must possess an active function for the development of caloric.

These considerations authorize us in admitting that fish produce a certain quantity of caloric, which is regularly abstracted by the medium in which they live; which is sufficient to establish the existence of currents without permitting a very evident elevation of temperature: and we are more particularly inclined to adopt this opinion, because when they are taken and suddenly placed in a situation of higher temperature they perish, which takes place by the currents of caloric from the interior to the exterior being arrested, whilst they can bear a very much higher temperature, provided that it is applied very gradually, which is explained by the fact that as their bodies are gradually heated above the surrounding temperature, they still experience currents of caloric by keeping up the contrasts.

The whale tribe, having respiratory organs of a higher order, possess a greater degree of temperature; but their bodies being enveloped with thick masses of fat, prevent the rapid loss of caloric by the surrounding medium.

Animals which live in the air, having vesicular lungs, are always of a temperature somewhat higher than that by which they are surrounded; they have

therefore, in themselves a means of producing heat; abstraction of this is continually experienced, either by transpiration, or by contact with colder matter; and their active circulation carries with rapidity the caloric produced by their internal organs to all parts of the economy, more particularly to the parts where the loss is greatest.

It is essential to remark that these animals which have the power of throwing off caloric otherwise than by simple contact, that is to say, by the evaporation of liquids whilst in the elastic medium which surrounds them, are already capable of supporting, without perishing, sudden elevations of external temperature, which would at once kill a fish. It is easily understood, in fact, that in a liquid medium there is but one way for caloric being carried off—namely, the contact of the liquid; while, on the other hand, by living in the air, this cause of loss of caloric is powerfully replaced by evaporation.

Warm blooded animals possess in the highest degree the conditions necessary to the existence of caloric currents through their organs, their complete and extensive respiratory apparatus acts on the whole of the circulating mass of blood; their circulation is performed with energy and rapidity;

both functions may be increased or diminished in a way to augment or decrease the necessity for the production of caloric.

They are placed in a position to experience the constant loss of caloric by contact or evaporation, as their natural temperature is above that of the elastic fluid which surrounds them; thus a transpiration always considerable, and which may be augmented by external influences, enables them to support, without perishing, external heat of very high degree. The perfection of the means necessary for producing currents of heat which is met with in warm-blooded animals, enables us to exemplify all our ideas on the existence and effects of these currents.

It is necessary to consider, in the first place, that in general, the corporeal mass of such an animal receives its heat from the interior, and is cooled from the exterior; and besides, the internal surface of the lungs is also the seat of the loss of caloric; so that we must necessarily admit that the mass of the organs are incessantly traversed by quantities of caloric, which depends simultaneously on the rapidity of its production, the activity of its transmission, and the relative quantity of waste in a given time; so that, for example, the rapidity of the current will become diminished—



1. If the production becomes more slow, from the respiratory function being less energetic;

2. If the transmission is less rapid, which will depend on the actual state of the circulation;

3. Finally, if the external waste is interrupted or diminished by the elevated temperature of the surrounding medium, by the presence of a great quantity of existing vapour, or by the immersion of the body in a liquid equally hot with itself.

Independently of these general effects, we should remark that the important vital phenomena take place in the tissues of which the organs are composed, and transmit an active state to all the solid matter which forms the vessels, or the cells which contain liquid; it is necessary, then, to give importance to this idea of caloric currents, to examine if they can, and ought in fact, to exist in the interior of the organic tissues. Now, it is demonstrated, that the arterial blood, in its exit from the lungs, possesses a temperature superior to the rest of the body; and it is probable that when it changes its state in the capillary system, it has the capability of disengaging a fresh quantity of caloric.

The arterial blood is rapidly transmitted to all parts of the body, at first by very large vessels deeply situated, so as to avoid any premature loss of heat.

On the other hand, the venous blood, returning from all parts of the body to the heart, cannot, and does not possess other than the temperature of these parts, which is much lower than the arterial blood. The venous blood returning slowly, and passing through dilatable vessels, of which a great number are situated externally, becomes lower in temperature by the direct application of cold.

From these explanations we must conclude that the whole organization is continually traversed by fluids, of different temperatures, so that every part of the body taken separately, can and must be the seat of caloric currents, passing from the arterial to the venous blood. It is also evident, that the heart and the lungs are the organs in which these currents are the most considerable, because they are incessantly penetrated by a mass of these two fluids at unequal temperatures.

May we not find in such considerations an explanation of the idea of Bichat, who saw that the organs perished when they were filled with black blood?—and do we not find the explanation of the phenomena of asphyxia, in admitting that the organs die when they are filled with fluids of the same temperature, which, consequently, can no longer produce currents of heat?

SECT. IV.—THE VITAL PHENOMENA AND THE ENERGY OF ORGANIC ACTION APPEAR TO BE IN PROPORTION TO THE RAPIDITY OF THE CALORIC CURRENTS, RATHER THAN IN PROPORTION TO THE TEMPERATURE.

A great number of facts and remarkable circumstances which are constantly met with in living beings, present themselves at once to the mind of every observer who supposes the existence of caloric currents, and add to the confirmation of the proposition; but it will be useful to mention a few of the principal.

The vegetable world is in a state which has been compared to sleep, and in which life appears suspended as long as they are deprived of their great means of evaporation, which depends on the heat of the air, and the presence of the leaves; but as soon as they are furnished with transpiratory organs, their vitality becomes remarkably active; they not only grow, but they reproduce new organs, and quickly replace those which have been cut off; one cannot attribute this increased action to the elevation of temperature alone; for the extremity of a vine branch produces fruit and flowers when intro-



duced into a hot-house, although all the rest of the plant remains exposed to the cold of winter ; and it is known, besides, that the interior of a plant is often much colder than the atmosphere, and that the folded leaves may contain icicles during the hottest season of the year ; in general, the activity of vegetation may be considered in proportion to the evaporation of which the vegetable is the seat, and consequently to the caloric current by which it is traversed.

In cold-blooded animals, in general, the evident energy of their vital actions cannot be attributed to the temperature, because this admits of great range of latitude, without changing the vital energy, whereas all the causes which produce a cessation of the currents bring with them dissolution, more or less prompt.

As regards warm-blooded animals, and man in particular, whose physiology interests us more particularly, it is evident that the vital energy is never in proportion to the temperature, whilst all the causes which produce a rapid passage of caloric through the organs, increases simultaneously the intensity of their action.

No warm-blooded animal can bear for a long time immersion in a liquid at the temperature of

its own body, although it still possesses the pulmonary transpiration as a means of throwing off heat.

A warm and humid atmosphere produces in all animals a feeling of general debility, and these two states of heat and moisture have the effect of raising the temperature of the animal, but diminishing the two means of disengaging heat, and, consequently, the rapidity of the caloric currents. On the other hand, the influence of a dry atmosphere produces a feeling of activity, and general excitation, as long as the internal means of producing heat supply the expenditure, and keep up the currents.

An individual in the highest state of fever, presents a state of temperature which differs very little from that of a healthy man; nevertheless, all his organs, without exception, are in a high state of excitation; but it is easy to ascertain that the means of producing heat are increased, that the transmission has become more rapid, and that the waste is proportionably augmented, so that, although at nearly the same temperature, the organs are, in fact, the seat of currents of caloric much more rapid than natural.

The same may be said of an organ in a state of inflammation, in which all the vital phenomena are found considerably increased, although its tempe-

rature is not sensibly elevated: the arrival of a greater quantity of arterial blood in the inflamed organ increases the source of heat; an abundant perspiration carries it off with great celerity; but the organ is not the less traversed by too rapid currents, which explains the excitation and the sensation of heat which are transmitted to the brain, at the same time that the observation of the temperature throws no light on these phenomena.

SECT. V.—THE ADOPTION OF THE PRECEDING PRINCIPLES  
SERVES TO EXPLAIN IN A SATISFACTORY MANNER  
A GREAT NUMBER OF VITAL PHENOMENA WHICH  
WITHOUT THEM COULD NOT BE UNDERSTOOD,  
AND WOULD THEREFORE PASS FOR ANOMALIES.

It will be sufficient by citing a certain number of remarkable circumstances, which hitherto could not be explained, to give an idea of the importance of understanding the influence of the currents.

The immersion for a short time in a cold bath, and other applications of cold water, may be considered as the most energetic stimulants of our functions; but they are not applicable to individuals already too weak to offer a chance of producing what is called *reaction*.



Without denying *the influence which vivid sensations, produced on the skin, exert on the general execution of the functions*, it appears evident that a slight and not long-continued cooling of the skin is particularly adapted to render the currents of caloric more rapid from the interior to the exterior, provided always that the internal production be sufficient to meet the demand; which, according to this theory, accounts satisfactorily for this phenomenon, and in general for the tonic action of cold baths.

The continued application, however, of ice, or a cold liquid, on a part of the body corresponding with an inflamed organ not very deeply seated, is one of the most powerful sedatives that can be used in the practice of medicine, and this seeming contradiction can be easily explained, when it is considered that cold applied superficially is also a means of producing currents, and that a cooling that penetrates deeply arrests and diminishes them, because in general the quantity of caloric transmitted by a body is in proportion to its temperature; for instance, a slight and superficial cooling on the surface of the head will cause the internal parts to be traversed by a greater quantity of hot currents, whilst, when the cooling is continued and enters deeply, affecting the

whole of the internal substance, the brain and its coverings will in this state be only traversed by very small quantities of caloric. Besides, by this lowering of the temperature the circulation is diminished, so that the means of a new supply of caloric is in a great measure cut off.

It is a general observation, that inflammation of the internal surface of the lungs is more frequent than any other, and that it is produced now by the respiration of cold air, at another time by a hot and dry air; as regards their frequent occurrence, it is evident that the mucous membrane of the lungs, being the exclusive seat where caloric is thrown off, are frequently affected by very rapid currents, and that these effects should be much more marked in the pulmonary mucous membrane, in consequence of the great quantity of arterial blood adjacent.

The application of a cataplasm or fomentation on an inflamed part is very useful in preserving and even increasing the local temperature; nevertheless it evidently diminishes the feeling of heat and pain in the suffering part: the exposure to cold air, on the contrary, increases the pain. How can these phenomena be understood, if we do not admit that the cataplasm, forming a kind of local bath, suppresses the transpiration, and the losses of caloric by

transmission, and consequently the two causes which render the currents of caloric more rapid in the inflamed part are diminished?

It is now the time to remark, that a great number of affections which are commonly attributed to suppressed perspiration depend, on the contrary, on causes which rendered it more active for a time—for instance, the exposure to a current of air. The inflammations which follow as a consequence of this, are they not satisfactorily explained by the preceding arguments?

When an individual rubs the hands for a certain time with snow, and while the snow is still in contact with the skin, there is a feeling of great heat experienced, and the skin becomes perfectly red: during this time the thermometer shews that the temperature is very low; the passage of caloric, which arriving rapidly from the central organs to the cool part, is the only means of explaining a similar effect.

When a part of the body has been nearly completely deprived of circulation by a long-continued application of cold, the application of heat is a sure way to cause its complete destruction; to render the general circulation as active as possible, and to rub the frozen parts with snow, are the means which



experience has taught the inhabitants of the North as the only safe and effectual way of restoring the part; and the salutary result can only be explained, by admitting that *vitality is restored to the organ when currents of caloric are produced, and not by the application of heat.*

Finally, the number of supposed aberrations of the animal heat, the sensations of cold and heat which the thermometer does not detect, and which to the present time have been considered as vital phenomena, independent of the ordinary laws of physics, appear to us to be explicable by the common laws, if it be admitted that our organs are sensible to the passage of caloric, independently of their actual temperature, and that the rapidity of the currents obeys the three influences already mentioned.

But we cannot hide from ourselves, that however great the number and exactness of the facts on which is founded the theoretical idea which forms the subject of this memoir may be, it still rests in the class of hypotheses which do not admit of direct demonstration; but we believe, nevertheless, that these kind of discussions are not without their utility in the sciences, when the object is to bring together a number of phenomena, to be ranged

under a principle, and thus to diminish a number of suppositions we are obliged to make to understand and assimilate the natural phenomena. I have been persuaded to publish these ideas, by many of the most eminent of my brethren, and it may be hoped, by submitting them to the examination of a great number of enlightened medical men, they may become the means of producing some valuable applications to the practice of medicine. I have already attempted this: the results I shall give in another memoir.

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As a certain gentleman would have been a great mechanist, only that he never would *make allowance for friction*, so would the cultivators of animal chemistry and physics explain a great deal more, but that they seldom will *make allowance for a nervous system*. The present remark does not so much apply to the learned author of the memoir I have appended.

END OF PART I.

















